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*September 23, 2004*

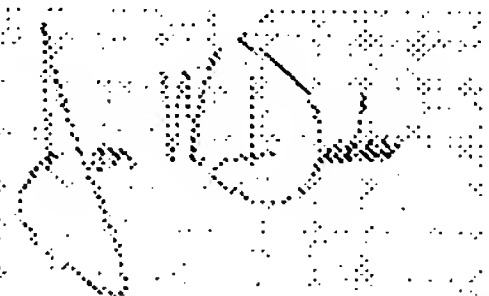
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APPLICATION NUMBER: 10/645,778

FILING DATE: August 21, 2003

RELATED PCT APPLICATION NUMBER: PCT/US04/27238

Certified by



Jon W Dudas

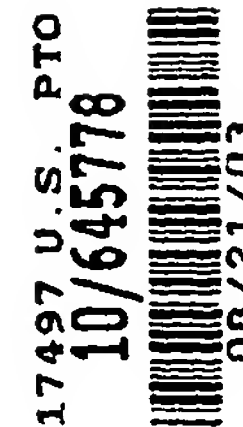
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WILSON  
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patent attorneys



August 21, 2003

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"Express Mail" mailing number: ER237497734US

Date of Deposit August 21, 2003

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Shaylor E. Dunn

Mail Stop Patent Application  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

Re: U.S. Patent Application for METHODS AND SYSTEMS FOR  
FACILITATING TRANSACTIONS BETWEEN COMMERCIAL BANKS  
AND POOLED DEPOSITOR GROUPS  
Our File No. 1483/3

Sir:

Please find enclosed the following:

1. A U.S. patent application for METHODS AND SYSTEMS FOR FACILITATING TRANSACTIONS BETWEEN COMMERCIAL BANKS AND POOLED DEPOSITOR GROUPS (48 pages);
2. Twenty-Three (23) sheets of formal drawings;
3. Utility Patent Application Transmittal (Form PTO/SB/05, 2 pages);
4. Unexecuted Declaration (Form PTO/SB/01, 3 pages);
5. An Information Disclosure Statement;
6. Form PTO/SB/08A (2 pages) in duplicate;
7. Copies of twenty-one (21) cited references;
8. Fee Transmittal (Form PTO/SB/17) in duplicate;
9. A return-receipt postcard to be returned to our offices with the U.S. Patent and Trademark Office date stamp thereon; and

tel 919.493.8000  
fax 919.419.0383

Jenkins, Wilson & Taylor, P.A.  
JenkinsWilsonTaylor.com

University Tower, Suite 1400 | 3100 Tower Boulevard | Durham, North Carolina 27707

Mail Stop Patent Application  
August 21, 2003  
Page 2

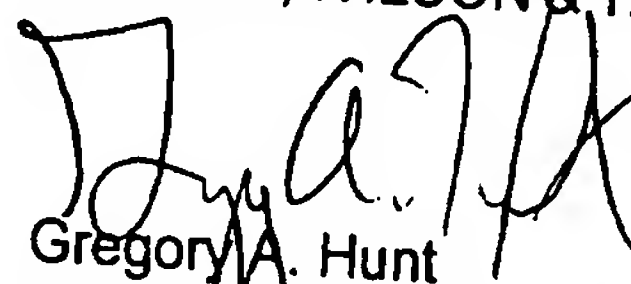
10. A Certificate of Express Mail No.: ER237497734US.

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The Commissioner is hereby authorized to charge any fees associated with the filing of this correspondence to Deposit Account Number 50-0426.

Respectfully submitted,

JENKINS, WILSON & TAYLOR, P.A.



Gregory A. Hunt  
Registration No. 41,085  
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GAH/sed

Enclosures



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# UTILITY PATENT APPLICATION TRANSMITTAL

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Attorney Docket No.	1483/3
First Inventor	Richard W. Whiting
Title	See 1 in Addendum
Express Mail Label No.	ER237497734US

## APPLICATION ELEMENTS

See MPEP chapter 600 concerning utility patent application contents.

## ADDRESS TO:

Mail Stop Patent Application  
Commissioner for Patents  
P.O. Box 1450  
Alexandria VA 22313-1450

1. ☒ Fee Transmittal Form (e.g., PTO/SB/17)  
(Submit an original and a duplicate for fee processing)
2. ☒ Applicant claims small entity status.  
See 37 CFR 1.27.
3. ☒ Specification [Total Pages 48]  
(preferred arrangement set forth below)
  - Descriptive title of the invention
  - Cross Reference to Related Applications
  - Statement Regarding Fed sponsored R & D
  - Reference to sequence listing, a table, or a computer program listing appendix
  - Background of the Invention
  - Brief Summary of the Invention
  - Brief Description of the Drawings (if filed)
  - Detailed Description
  - Claim(s)
  - Abstract of the Disclosure
4. ☒ Drawing(s) (35 U.S.C. 113) [Total Sheets 23]
5. Oath or Declaration [Total Sheets 3]
  - a. ☐ Newly executed (original or copy)
  - b. ☐ Copy from a prior application (37 CFR 1.63(d))  
(for continuation/divisional with Box 18 completed)
  - i. ☐ **DELETION OF INVENTOR(S)**  
Signed statement attached deleting inventor(s) name in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b).
6. ☐ Application Data Sheet. See 37 CFR 1.76

7. ☐ CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix)
8. Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary)
  - a. ☐ Computer Reader Form (CRF)
  - b. Specification Sequence Listing on:
    - i. ☐ CD-ROM or CD-R (2 copies); or
    - ii. ☐ Paper
  - c. ☐ Statements verifying identity of above copies

## ACCOMPANYING APPLICATION PARTS

9. ☐ Assignment Papers (cover sheet & document(s))
10. ☐ 37 CFR 3.73(b) Statement ☐ Power of Attorney  
(when there is an assignee)
11. ☐ English Translation Document (if applicable)
12. ☒ Information Disclosure ☒ Copies of IDS  
Statement (IDS)/PTO-1499 Citations
13. ☐ Preliminary Amendment
14. ☒ Return Receipt Postcard (MPEP 503)  
(Should be specifically itemized)
15. ☐ Certified Copy of Priority Document(s)  
(if foreign priority is claimed)
16. ☐ Nonpublication Request under 35 U.S.C. 122  
(b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent.
17. ☐ Other: .....

18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in the first sentence of the specification following the title, or in an Application Data Sheet under 37 CFR 1.76:

☐ Continuation ☐ Divisional ☐ Continuation-in-part (CIP) of prior application No.: .....

Prior application information:

Examiner: .....

Art Unit: .....

For CONTINUATION OF DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

## 19. CORRESPONDENCE ADDRESS

☒ Customer Number: 25297 OR ☐ Correspondence address below

Name					
Address					
City	State	Zip Code			
Country	Telephone	Fax			
Name (Print/Type)	Gregory A. Hunt		Registration No. (Attorney/Agent)	41,085	
Signature			Date	08/21/2003	

This collection of information is required by 37 CFR 1.53(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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## Addendum

1. METHODS AND SYSTEMS FOR FACILITATING TRANSACTIONS BETWEEN  
COMMERCIAL BANKS AND POOLED DEPOSITOR GROUPS

# FEE TRANSMITTAL

## for FY 2003

Effective 01/01/2003. Patent fees are subject to annual revision.

☒ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$ 618.00)

## Complete if Known

Application Number	
Filing Date	Herewith
First Named Inventor	Richard W. Whiting
Examiner Name	
Art Unit	
Attorney Docket No.	1483/3

## METHOD OF PAYMENT (check all that apply)

☐ Check ☐ Credit card ☐ Money Order ☐ Other ☐ None
☒ Deposit Account
 Deposit Account Number  
 Deposit Account Name

50-0426

Jenkins, Wilson &amp; Taylor, P.A.

The Commissioner is authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☐ Credit any overpayments☐ Charge any additional fee(s) during the pendency of this application☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.

## FEE CALCULATION

## 1. BASIC FILING FEE

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
1001	750	2001	375	Utility filing fee	375.00
1002	330	2002	165	Design filing fee	
1003	520	2003	260	Plant filing fee	
1004	750	2004	375	Reissue filing fee	
1005	160	2005	80	Provisional filing fee	
SUBTOTAL (1)					(\$ 375.00)

## 2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

Total Claims 47 - 20\*\* = 27 x 9 = 243

Independent Claims 3 - 3\*\* = 0 x  = 0

Multiple Dependent  x  =

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
1202	18	2202	9	Claims in excess of 20	
1201	84	2201	42	Independent claims in excess of 3	
1203	280	2203	140	Multiple dependent claim, if not paid	
1204	84	2204	42	** Reissue independent claims over original patent	
1205	18	2205	9	** Reissue claims in excess of 20 and over original patent	
SUBTOTAL (2)					(\$ 243.00)

\*\*or number previously paid, if greater. For Reissues, see above

## FEE CALCULATION (continued)

## 3. ADDITIONAL FEES

Large Entity Small Entity

Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description	Fee Paid
1051	130	2051	65	Surcharge - late filing fee or oath	
1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet	
1053	130	1053	130	Non-English specification	
1812	2,520	1812	2,520	For filing a request for ex parte reexamination	
1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action	
1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action	
1251	110	2251	55	Extension for reply within first month	
1252	410	2252	205	Extension for reply within second month	
1253	930	2253	465	Extension for reply within third month	
1254	1,450	2254	725	Extension for reply within fourth month	
1255	1,970	2255	985	Extension for reply within fifth month	
1401	320	2401	160	Notice of Appeal	
1402	320	2402	160	Filing brief in support of an appeal	
1403	280	2403	140	Request for oral hearing	
1451	1,510	1451	1,510	Petition to institute a public use proceeding	
1452	110	2452	55	Petition to revive - unavoidable	
1453	1,300	2453	650	Petition to revive - unintentional	
1501	1,300	2501	650	Utility issue fee (or reissue)	
1502	470	2502	235	Design issue fee	
1503	630	2503	315	Plant issue fee	
1460	130	1460	130	Petitions to the Commissioner	
1807	50	1807	50	Processing fee under 37 CFR 1.17(q)	
1806	180	1806	180	Submission of Information Disclosure Stmt	
8021	40	8021	40	Recording each patent assignment per property (times number of properties)	
1809	750	2809	375	Filing a submission after final rejection (37 CFR 1.129(a))	
1810	750	2810	375	For each additional invention to be examined (37 CFR 1.129(b))	
1801	750	2801	375	Request for Continued Examination (RCE)	
1802	900	1802	900	Request for expedited examination of a design application	

Other fee (specify) \_\_\_\_\_

\*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$ 0.00)

## SUBMITTED BY

(Complete if applicable)

Name (Print/Type)	Gregory A. Hunt	Registration No. (Attorney/Agent)	41,085	Telephone	919-493-8000
Signature		Date	August 21, 2003		

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UNITED STATES PATENT APPLICATION

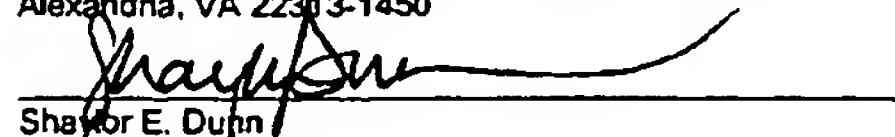
METHODS AND SYSTEMS FOR FACILITATING TRANSACTIONS  
BETWEEN COMMERCIAL BANKS AND POOLED DEPOSITOR GROUPS

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Entity: Small Entity

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Application, Commissioner for Patents, P.O. Box 1450,  
Alexandria, VA 22303-1450  
  
Shayor E. Dupin

Description

METHODS AND SYSTEMS FOR FACILITATING TRANSACTIONS  
BETWEEN COMMERCIAL BANKS AND POOLED DEPOSITOR GROUPS

5

Technical Field

The present invention relates to methods, systems, and computer  
program products for facilitating financial transactions between commercial  
banks and pooled depositor groups. More particularly, the present invention  
relates to methods and systems for providing liquid deposit opportunities for  
10 pooled depositor groups and for providing deposit funds from the pooled  
depositor groups to commercial banks that the commercial banks may be  
permitted by regulatory authorities to count as stable deposits.

Background Art

15 In the banking industry, it is desirable to maintain a certain percentage of  
core deposits. Core deposits are deposits that do not change significantly in  
amount with fluctuations in the interest rate paid on the deposits. Savings  
account deposits are one example of a bank's core deposits. In the United  
States, the percentage of core deposits affects the bank's ability to maintain a  
20 favorable regulatory rating.



In addition to core deposits, banks often rely on non-core funding sources, such as brokered CDs. Brokered CDs are offered by a bank to retail customers through a deposit broker. Brokered CDs are less stable as a source of funds for banks than core deposits because depositors in brokered CDs are typically sensitive to interest rate fluctuations.

Another problem with using brokered CDs to obtain cash is that in the United States, if a bank maintains too high of a percentage of brokered deposits, the bank may be sanctioned by a regulatory agency, such as the Federal Reserve for federally chartered banks or a state banking agency for state chartered banks. Yet another problem associated with using brokered deposits is that banks are required to pay a broker's commission for brokered deposits. Thus, in the banking industry, there exist a need for a new way for banks to obtain stable funds.

Pooled depositor groups, such as trust departments, pension funds, government entities, insurance companies, and any entities that are allowed to make deposits into a negotiated order of withdrawal (NOW) account, are constantly looking for safe, insured deposit vehicles for their funds. In addition, it is desirable for individual depositors in a pooled depositor group to be able to access funds without penalty on a short-term basis. Conventionally, pooled depositor groups have invested in money market funds. However, investing in money market funds is undesirable because money market funds have historically paid low interest rates. Certificates of deposit are undesirable because money is not accessible on a short-term basis without paying a penalty. In addition, under current FDIC regulations, an individual's deposits at

a single institution in excess of \$100,000 are not federally insured. As a result, in order to fully insure a depositor's investment, a trust department is required to divide a depositor's assets in excess of \$100,000 among multiple banks. Accordingly, in light of these difficulties associated with conventional  
5 investment vehicles, there exists a need for an insured or collateralized deposit vehicle for pooled depositor groups.

#### Disclosure of the Invention

In order to address the aforementioned problems associated with  
10 providing cash to commercial banks and providing insured, liquid deposit opportunities for pooled depositor groups, one aspect of the invention includes a method and associated computer software for facilitating transactions between pooled depositor groups and commercial banks. In one exemplary method, banks and depositor groups register with a control center. Control  
15 center employees may solicit deposit cash from different pooled depositor groups and aggregate the deposit cash of the multiple pooled depositor groups to produce a stable source of funds. The control center may then notify banks of the stable source of funds and inquire as to the interest rate that banks are willing to pay for the stable source of funds.

20 In order to receive funds from the stable source of funds, a bank will post a master NOW account with an appointed custodian. The control center sets an interest rate to be paid on the NOW accounts based on the rate that the bank is willing to pay for all or a portion of the stable funds source and the rate of return that the pooled depositor groups expect on their deposits. The

control center notifies the depositor group of the availability of the NOW account at the specified interest rate. The depositor group then deposits funds in the NOW account. The control center monitors transactions between the pooled depositor groups and the custodian and between the custodian and the  
5 banks and generates reports.

Because the control center aggregates deposit funds of multiple pooled depositor groups, the pooled depositor groups should be able to offer a stable source of funds to commercial banks. As a result, banks are permitted to treat the funds received from the pooled depositor groups as stable deposits. In  
10 addition, money deposited in the master NOW accounts are FDIC insured up to \$100,000 for any single depositor within the pooled depositor group. Through the control center, funds in excess of \$100,000 to any single depositor are deposited in separate banks to insure FDIC coverage or the banking institution collateralizes the funds in excess of \$100,000. However, by using a master  
15 NOW account, funds from a depositor group in excess of \$100,000 can be fully insured provided that funds from individual depositors within the group do not exceed \$100,000, as per a recent statement from the FDIC. Thus, if a depositor group of 100 depositors with \$50,000 each deposits funds in a master NOW account with a single bank, the entire amount will be FDIC  
20 insured.

Another advantage of using master NOW accounts is that depositors are allowed to withdraw money from a master NOW account on a daily basis without penalty. As a result, using master NOW accounts provides a liquidity advantage over conventional certificates of deposit.

The following definitions apply to the corresponding terms used herein:

1. Commercial bank: A bank chartered by a state or federal agency with the ability to receive time and demand deposits, to make commercial and mortgage loans, and to have insured deposits.  
5 In the United States, the deposits of a commercial bank are insured by the Federal Deposit Insurance Corporation (FDIC).
2. NOW account: A NOW account refers to a negotiated order of withdrawal account, which is an account with a commercial bank that permits unlimited activity with regard to deposits and  
10 withdrawals.
3. Master NOW account: A NOW account having a predetermined limit as to the total amount that can be deposited against the account. This limit may be determined by an agreement between the commercial bank posting the account and the control center.
- 15 4. Custodian: An entity, such as a bank, with the power granted by a state or federal agency to hold assets on behalf of a pooled depositor group or a commercial bank.
5. Core deposit: A class of deposits deemed by an agency, such as the FDIC, to be stable (constant, minimum fluctuation in total  
20 amount, and available at a reasonable cost.)
6. Pooled depositor group: A group of individuals or entities that pool funds for deposit purposes and that are permitted to deposit funds in a NOW account. Examples of pooled depositor groups include trust departments, pension funds, and government



entities. Currently, commercial businesses are not permitted to deposit funds in a NOW account.

- 5           7.     Certificate of deposit: A certificate showing evidence of funds deposited for a specific period of time at a specific rate. The funds in a CD are not available for early withdrawal without specified penalties. CDs in excess of \$100,000 are negotiable and are traded by dealers in money market investments.
- 10       8.     Control center: A point through which information flows for controlling transactions between commercial banks and pooled depositor groups is controlled.
- 15       9.     Stable funds: Pooled funds offered to commercial banks that preferably do not fluctuate significantly in amount as the interest rate changes.
- 20       10.    Hot funds: Funds available from a pooled depositor group for a short-term deposit or a specific transaction. A different rate may be negotiated for each transaction.
11.    Term funds: Funds available from a pooled depositor group offered to investment entities that need money for specified terms, such as 30 days, 60 days, 90 days, or 120 days. Conventionally, such funds have gone into CDs. However, community banks can pay higher rates for these funds because they are instant and avoid going to the brokerage CD market. Rates may be negotiated on individual transactions.

As indicated above, the custodian's duties are to hold assets on behalf of pooled depositor groups and commercial banks. In addition custodians may have the following duties:

1. Establish a custody account for the control center in which the following transactions will be reflected.
2. Within the custody account, establish an asset record for each commercial bank master NOW account. The asset amount will reflect the total deposit by all depositors in each NOW account. The control center will provide instructions regarding the setup of new NOW accounts within a reasonable period of time prior to the funding of particular NOW accounts.
3. Receive federal funds wires on a daily basis from various depositors who have signed agreements with the control center. The funds must be received within a reasonable period of time to be invested on the same day.
4. In conjunction with each incoming wire, accept written direction from the control center (e.g., by fax or e-mail) with regard to the application of funds. Direction must be received within a reasonable period of time for same-day deposit and will include the amount to be received and the name of the bank to which funds will be wired (for deposit-purchase into the selected NOW account). If volumes increase dramatically, the deadline for directions may be changed to an earlier time.

5. Wire funds received within a reasonable period of time from depositors to various commercial banks on a daily basis, as instructed by the control center, before the close of business on the day the funds are received.
- 5 6. Reconcile holdings in the custody account to statements received from NOW account issuers (commercial banks).
7. As earnings are added to NOW accounts each month, post the addition of those earnings to each NOW account held in the custody account in order to bring the custody account holdings  
10 current with issuing commercial bank records.
8. As depositors request funds, withdraw principal from various NOW accounts on a daily basis (e.g., via funds wires) as instructed by the control center.
9. Wire withdrawn monies back to depositors on a daily basis as  
15 instructed by the control center.
10. Once a month, receive by wire an earnings spread on the NOW accounts from each issuing commercial bank and wire to the control center the earnings spread minus the custodian fee. The earnings spread will be determined on each NOW account by the  
20 control center. The control center may choose a different method for distribution: the earnings spread may be wired directly to the control center by the issuing commercial bank, rather than through the custodian. If this method of payment is

chosen, the custodian will send a monthly invoice to the control center, which will be paid within 30 days of receipt.

Accordingly, it is an object of the invention to provide improved methods and systems for facilitating transactions between commercial banks and pooled  
5 depositor groups.

It is another object of the invention to provide a short-term liquid deposit vehicle for pooled depositor groups that is fully FDIC insured up to \$100,000 or is collateralized from any single individual within a pooled depositor group.

Some of the objects of the invention having been stated hereinabove,  
10 and which are addressed in whole or in part by the present invention, other objects will become evident as the description proceeds when taken in connection with the accompanying drawings as best described hereinbelow.

#### Brief Description of the Drawings

15 Preferred embodiments of the invention will now be explained with reference to the accompanying drawings of which:

Figure 1 is a block diagram of a system for facilitating financial transaction between commercial banks and pooled depositor groups according to an embodiment of the present invention;

20 Figure 2 is a flow chart illustrating exemplary steps for facilitating transactions between commercial banks and pooled depositor groups according to an embodiment of the present invention;



Figure 3 is a tree diagram illustrating an exemplary web site map for a system for facilitating transactions between commercial banks and pooled depositor groups according to an embodiment of the present invention;

Figure 4 is block diagram of an exemplary login screen of a system for  
5 facilitating transactions between commercial banks and pooled depositor groups according to an embodiment of the present invention;

Figure 5 is a block diagram illustrating an exemplary market information screen for a pooled depositor group in a system for facilitating transactions between commercial banks and pooled depositor groups according to an  
10 embodiment of the present invention;

Figure 6 is a block diagram illustrating an exemplary deposit screen for a pooled depositor group in a system for facilitating transactions between commercial banks and pooled depositor groups according to an embodiment of the present invention;

Figure 7 is a block diagram of an exemplary withdrawal screen for a  
15 pooled depositor group in a system for facilitating transactions between commercial banks and pooled depositor groups according to an embodiment of the present invention;

Figure 8 is a block diagram illustrating an exemplary account screen for  
20 a pooled depositor group in a system for facilitating transactions between commercial banks and pooled depositor groups according to an embodiment of the present invention;

Figure 9 is a block diagram illustrating an exemplary transaction screen for a pooled depositor group in a system for facilitating transactions between

commercial banks and pooled depositor groups according to an embodiment of the present invention;

Figure 10 is a block diagram illustrating an exemplary business rules screen for a pooled depositor group in that may be associated with a system for facilitating transactions between commercial banks and pooled depositor groups according to an embodiment of the present invention;

Figure 11 is a block diagram of an exemplary market information screen for a commercial bank in a system for facilitating transactions between commercial banks and pooled depositor groups according to an embodiment of the present invention;

Figure 12 is a block diagram illustrating an exemplary borrow screen for a commercial bank in a system for facilitating transactions between commercial banks and pooled depositor groups according to an embodiment of the present invention;

Figure 13 is a block diagram illustrating an exemplary repay screen for a commercial bank in a system for facilitating transactions between commercial banks and pooled depositor groups according to an embodiment of the present invention;

Figure 14 is a block diagram illustrating an exemplary accounts screen for a commercial bank in a system for facilitating transactions between commercial banks and pooled depositor groups according to an embodiment of the present invention;

Figure 15 is a block diagram of an exemplary transactions screen for a commercial bank in a system for facilitating transactions between commercial

banks and pooled depositor groups according to an embodiment of the present invention;

Figure 16 is a block diagram of an exemplary business rules screen for a commercial bank in a system for facilitating transactions between commercial  
5 banks and pooled depositor groups according to an embodiment of the present invention;

Figure 17 is a block diagram of an exemplary market management screen for a custodian in a system for facilitating transactions between a commercial bank and a pooled depositor group according to an embodiment of  
10 the present invention;

Figure 18 is a block diagram illustrating an exemplary lenders screen for a custodian in a system for facilitating transactions between commercial banks and pooled depositor groups according to an embodiment of the present invention;

15 Figure 19 is a block diagram illustrating an exemplary borrowers screen for a custodian in a system for facilitating transactions between commercial banks and pooled depositors groups according to an embodiment of the present invention;

Figure 20 illustrates an exemplary accounts screen for a custodian in a  
20 system for facilitating transactions between commercial banks and pooled depositor groups according to an embodiment of the present invention;

Figure 21 is a block diagram illustrating an exemplary transactions screen for a custodian in a system for facilitating transactions between

commercial banks and pooled depositor groups according to an embodiment of the present invention;

Figure 22 is a block diagram illustrating an exemplary business rules screen for a custodian in a system for facilitating transactions between commercial banks and pooled depositor groups according to an embodiment of the present invention; and

Figure 23 is a block diagram illustrating an exemplary customer screen for an administrator a system for facilitating transactions between commercial banks and pooled depositor groups according to an embodiment of the present invention.

#### Detailed Description of the Invention

Figure 1 illustrates a system for facilitating transactions between commercial banks and pooled depositor groups according to an embodiment of the present invention. In Figure 1, block 100 represents pooled depositor groups that have available cash to invest in insured, liquid deposit opportunities. A depositor interface 102 is provided for these groups to access insured, liquid deposit opportunities created based on cash needed by commercial banks for core deposits. The cash that pooled depositor groups 100 have available for deposit may originate from deposits, represented by block 104. The deposits may be from individual trusts, taxpayers, retirement funds, or other suitable cash source.

A custodian 108 may be provided as a trusted intermediary through which pooled depositor groups 100 may make their deposit cash available. In



one example, custodian 108 may be a known financial institution, such as a national bank. However, the present invention is not limited to using a custodian to facilitate transactions between commercial banks and pooled depositor groups. In one implementation, custodian 108 may be omitted and  
5 control center 106 may function as a custodian for the commercial banks and the pooled depositor groups.

In the illustrated example, both control center 106 and custodian 108 include software interfaces 110 and 112. Software interface 110 at control center 106 allows control center 110 to view transactions made through  
10 custodian 108. Custodian interface 112 allows custodian 108 to view accounts and transfer cash to and from the accounts.

On the right hand side of the diagram, commercial banks 114 may need cash for core deposits to cover loans 116. Alternatively, or in addition, banks 114 may need term funds or hot funds. In order to obtain needed funds, banks  
15 114 register with control center 106 and post master NOW accounts with custodian 108. Commercial banks software interface 118 allows banks to post to master NOW accounts and notifies banks 114 of the interest rate to be paid on cash obtained by banks 114 from custodian 108. In order to provide an insured, liquid deposit opportunity for depositors 100 and cash to banks 114,  
20 an interest rate that is attractive to both depositors 100 and commercial banks 114 must be determined. In a preferred embodiment of the invention, depositors 100 are offered a first interest rate, and commercial banks pay a second interest rate, where the second interest rate is higher than the first interest rate. The owners of control center 106 may be able to obtain favorable

interest rates from commercial banks **114** by aggregating cash from multiple pooled depositor groups. Based on the difference in interest rates, the owners of control center **106** may fund operations and preferably make a profit. Once the interest rates are set, control center **106** communicates the first interest  
5 rate to depositors **100** via depositor interface **102** and communicates the second interest rate to banks **114** via commercial banks interface **118**. Both interest rates are preferably guaranteed for a fixed term, such as one month. In addition, depositors **100** are preferably allowed to withdraw cash deposited without penalty in predetermined amounts at predetermined time intervals. For  
10 example, the cash deposited by depositors **100** may be made available without penalty to the depositors in denominations of \$1 on a daily basis.

Because the software illustrated in Figure 1 provides a convenient deposit vehicle for commercial banks to obtain stable money for core deposits and term funds, commercial banks **114** can reduce their percentages of  
15 brokered deposits and thereby increase the likelihood of a favorable regulatory rating. In addition, the system and software illustrated in Figure 1 provides a convenient liquid deposit opportunity for depositors. Thus, the system illustrated in Figure 1 facilitates transactions between commercial banks and pooled depositor groups.

20 Figure 2 is a flow chart illustrating exemplary steps that may be performed by control center **106** in facilitating transactions between commercial banks and pooled depositor groups according to an embodiment of the present invention. Referring to Figure 2, in step **200**, banks and depositor groups register with control center **106**. For the banks, the registration may include

qualifying as a commercial bank in accordance with predetermined standards, such as federal or state regulatory standards. For pooled depositor groups **100**, registration may also include qualifying as an entity permitted to make deposits in a NOW account and guaranteeing a predetermined amount of  
5 deposit cash.

After registration, a pooled depositor group **100** may contact control center **106** with a deposit need. For example, pooled depositor group **100** may indicate to control center **106** that depositor group **100** desires to deposit \$10 million, wants a return of 2%, and desires for individual depositors to be able to  
10 access the money on a daily basis. Step **202** may occur multiple times as the operators of control center **106** determine available cash from different pooled depositor groups.

In step **204**, control center **106** aggregates the deposit needs of multiple pooled depositor groups to produce a stable funds source. As discussed  
15 above, providing a stable funds source to commercial banks is important so that the commercial banks can consider the funds core deposits. In step **206**, control center **106** notifies commercial banks of the amount of money available, and inquires as to the interest rate that the banks are willing to pay for the money. For example, a bank may agree to pay 235 basis points for \$10  
20 million, where basis point is equal to one one-hundredth of one percent. In step **208**, banks **114** post master NOW accounts with custodian **108**. In step **210**, control center **106** sets the interest rate to be paid to the pooled depositor group lower than rate that the bank is willing to pay and at or above the rate that the pooled depositor group expects and notifies the depositor group of the

availability of a NOW account at the interest rate. Continuing with the example, if the depositor group expects 200 basis points, control center 106 may set the interest rate to be paid to the trust department to at least 200 basis points. Since the bank is willing to pay 235 basis points, control center 106 can  
5 generate up to 35 basis points in revenue.

In step 212, the depositor group deposits funds with custodian 108. Custodian 108 places the funds in one or more master NOW accounts in accordance with instructions from control center 106. In step 214, control center 106 manages transactions and generates reports to both the depositor  
10 group 100 and commercial banks 114. Managing transactions may include providing wiring instructions to depositor 100, custodian 108, and banks 114. In addition, managing transactions may include providing sub-accounting information to custodian 108 regarding individual depositors in a pooled depositor group so that individual depositors' deposits can be FDIC insured.  
15 Managing transactions may also include collecting interest paid by commercial banks 114 and distributing the interest to depositors. Yet another aspect of managing the transactions may include coordinating withdrawals made by depositors 100 in a manner that reduces transactions and wiring expenses. Two methods for coordinating withdrawals will be described in detail below.

20 Because the money is deposited in master NOW accounts, pooled depositor groups are allowed to withdraw funds without penalty on a daily basis. Thus, the invention provides an advantage to depositor groups over conventional certificates of deposit.



In one exemplary implementation, a system for facilitating transactions between commercial banks and pooled depositor groups may be implemented using a web server that provides the interfaces illustrated in Figure 1. Such a web server may be implemented using any suitable commercially available web server platform, such as an Apache web server. Each interface illustrated in Figure 1 may be implemented as an application capable of executing on such a platform. Figure 3 is a tree diagram illustrating an exemplary website map for a web implemented system for facilitating transactions between commercial banks and pooled depositor groups according to an embodiment of the present invention. Referring to Figure 3, an exemplary website map **300** includes a login screen **302** that provides access to interfaces **102**, **110**, **112**, and **118** illustrated in Figure 1. Each interface may include a series of computer screens or web pages tailored to the functionality provided by the interface. In the illustrated example, pooled depositor group interface **102** includes a market information page **304**, a deposit page **306**, a withdrawal page **308**, an accounts page **310**, a transactions page **312**, a business rules page **314**, and a profile page **316**. Each of the pages **304-316** are preferably tailored to allow pooled depositor groups to obtain rate information provided by commercial banks, deposit money in master NOW accounts, withdraw money from the master NOW accounts on a daily basis, and view transaction information.

Commercial banks interface **118** includes a market information page **318**, a borrow page **320**, a repay page **322**, an accounts page **324**, a transactions page **326**, a business rules page **328**, and a profile page **330**. Pages **318-330** are preferably tailored to allow a commercial bank to post

master NOW accounts, to view the status of master NOW accounts, to repay obligations on master NOW accounts, and to perform other actions related to obtaining deposit cash from pooled depositor groups.

5 Custodian interface **112** includes a market management page **332**, a lenders page **334**, a borrowers page **336**, an accounts page **338**, a transactions page **340**, and a business rules page **342**. Pages **332-342** are preferably tailored to allow a custodian to manage transactions between commercial banks and pooled depositor groups.

10 Administrator interface **110** includes a market management page **344**, a customers page **346**, an accounts page **348**, an FDIC information page **350**, a business rules page **352**, a reports page **354**, and a system administration page **356**. Pages **344-356** are preferably structured to allow administrator interface **110** to control transactions between pooled depositor groups and commercial banks. Each of the web pages illustrated in Figure 3 will now be  
15 described in further detail.

Figure 4 illustrates an example of a login screen **302**. In the example login screen, a user is requested to enter a user ID and a password. Based on the user ID and the password, the user will be directed to the appropriate interface **102**, **110**, **112**, or **118**.

20 Figure 5 illustrates an example of market information page **304** for a pooled depositor group. In the illustrated example, web page **304** includes a toolbar **500** that allows a pooled depositor group to access other pages associated with pooled depositor group interface **102**. In the illustrated example, pooled depositor group interface **304** includes a market information

section including market information of interest to a pooled depositor group. In the illustrated example, market information section **502** includes a cash demand field **504**, a cash available field **506**, a current interest rate field **508**, a start date field **510**, an end date field **512**, and a terms and conditions field **514**.

- 5 Cash demand field **504** stores demand for cash by commercial banks **114**. This number may be updated by control center **106** on a daily basis based on demand received from commercial banks. Cash available field **506** may display cash available from the particular pooled depositor group. Current interest rate field **508** may display the current interest rate to be paid to the
- 10 pooled depositor group set by control center **106**. Start and end date fields **510** and **512** may display the start and end dates at which the current interest rate is available. Finally, terms and conditions field **514** may store terms and conditions associated with payback of the funds.

- Figure 6 illustrates an example of a deposit page **306** that may be
- 15 displayed to a pooled depositor group. In the illustrated example, deposit page **306** includes various fields that allow a pooled depositor group to make a deposit. These fields may include a from account field **600**, a to account field **602**, an amount field **604**, a deposit date field **606**, a terms and conditions field **608**, and a submit button **610**. From account field **600** is an input field that
- 20 allows a pooled depositor group to indicate an account from which a deposit is authorized. To account field **602** may indicate master NOW accounts issued by various pooled depositor groups. Amount field **604** may store an amount that a pooled depositor group desires to withdraw from an account and deposit in a master NOW account. Deposit date field **606** is an input field that allows a

depositor to input a date on which a deposit is to occur. Terms and conditions field **608** may display terms and conditions associated with the transaction. Finally, support button **610** may initiate functionality for depositing the funds in an account associated with a commercial bank.

5           Figure 7 illustrates an exemplary withdrawal page **308** associated with pooled depositor group interface **102**. In the illustrated example, withdrawal page **308** includes various fields for allowing a pooled depositor group to withdraw money from an account with custodian **108**. These fields may include a from account field **700**, a to account field **702**, an amount field **704**, a withdrawal date field **706**, and a submit button **610**. From account field **700** allows a pooled depositor group to specify an account with custodian **108** from which funds are to be withdrawn. To account field **702** allows a pooled depositor group to specify an account to which the funds are to be deposited. Amount field **704** specifies an amount of the withdrawal. Withdrawal date field **706** allows the pooled depositor group to specify a withdrawal date for the funds. Submit button **610** allows the pooled depositor group to initiate steps to complete the transaction. As discussed above, funds deposited in master NOW accounts are preferably accessible by pooled depositor groups on a daily basis without penalty, thus providing liquidity advantages over conventional  
10  
15  
20 certificates of deposit.

Figure 8 illustrates an example of an accounts page **310** associated with pooled depositor group interface **102**. In Figure 8, accounts page **310** includes an accounts data section **800** that stores data regarding accounts of a pooled depositor group. In Figure 8, accounts data section **310** includes an account

field **802**, a manager field **804**, a total value field **806**, a last value field **808**, a last date field **810**, an edit field **812**, and a delete field **814**. Account field **802** may identify accounts of a pooled depositor group. Manager field **804** may indicate the custodian managing the account. Total value field may indicate the total value of the account. Last value field **808** may indicate the last value of the account on a particular date. Last date field **810** may indicate the date on which the last value was provided. Finally, edit and delete fields **812** and **814** may allow the depositor group to edit or delete information in accounts section **800**.

Figure 9 illustrates an example of a transactions page **312** associated with pooled depositor group interface **102**. In the illustrated example, transactions page **312** includes a transaction history section **900** that stores a history of deposits and withdrawals made by the pooled depositor group. In the illustrated example, transaction history section includes a number field **902**, a date field **904**, an operation field **906**, a from account field **908**, a to account field **910**, an amount field **912**, and a terms field **914**. Number field **902** may store a transaction number for a particular transaction of a pooled depositor group. Date field **904** may store the date of the transaction. Operation field **906** may store the type of transaction, i.e., whether the transaction was a deposit or a withdrawal. From account field **908** specifies the account of the pooled depositor group from which funds were withdrawn. To account field **910** stores the master NOW account to which funds were deposited. Amount field **912** stores the amount of the transaction. Finally, terms field **914** may display



terms associated with the transaction, such as the interest rate or the time period for the deposit.

Figure 10 illustrates an exemplary business rules page **314** associated with pooled depositor group interface **102**. In the illustrated example, business rules page **314** includes a business rules section **1000** that stores business rules of a pooled depositor group. Examples of business rules that may be stored in business rules section **1000** include a type or rating status of banks that the commercial pooled depositor group that the depositor group would be willing to deposit funds and whether or not to re-deposit proceeds. These rules may be used by control center **106** when determining the aggregate money supply available to a particular bank. For example, different amounts of funds may be made available to different banks depending on the banks' relative regulatory ratings.

Figure 11 illustrates an example of a market information page **318** that may be associated with commercial bank interface **118**. In the illustrated example, commercial banks market information page **318** includes the same fields described above with regard to the market information page **304** associated with pooled depositor group interface **102**. In Figure 11, these fields are renumbered **1102-1112**. Fields **1102-1112** display to the commercial bank information regarding cash demand, available cash, current interest rate, start date and end date for the interest rate, and terms and conditions. As discussed above, the values for these fields may be set by control center **106**. However, the interest rate displayed in current interest field **1106** of commercial bank market information page **318** is preferably different from that displayed in

the corresponding field of market information page **304** of pooled depositor groups interface **102**. As discussed above, the interest rates provided and displayed to pooled depositor groups and commercial banks may be set by the owners of control center **106**.

5           Figure 12 illustrates an example of a borrow page **320** of commercial banks interface **118**. In Figure 12, borrow page **320** includes functionality for allowing a commercial bank to borrow money made available by pooled depositor groups **100**. This functionality may be implemented in a plurality of input fields that receive data from the commercial bank and provide the data to  
10   control center **106**. These fields may include a from account field **1202**, a to account field **1204**, an amount field **1206**, a borrow date field **1208**, a terms and conditions field **1210**, and a submit button **610**. A commercial bank uses from account field **1202** to specify a depositor group's account posted with custodian **108** from which the commercial bank desires to borrow money. To  
15   account field **1204** allows the commercial bank to specify a master NOW account into which the borrowed funds are to be received. Amount field **1206** is used to specify the amount that the commercial bank desires to borrow. The commercial bank uses borrow date field **1208** to specify the date on which the funds are to be borrowed. Terms and conditions field **1210** specifies the terms  
20   and conditions of the transaction. Finally, submit button **610** initiates a borrow transaction.

Figure 13 illustrates an exemplary repay page of commercial banks interface **118**. Repay page **322** includes functionality for allowing a commercial bank to repay funds borrowed from a pooled depositor group. In the illustrated

example, this functionality includes a from field **1300**, a to field **1302**, an amount field **1304**, and a repayment date field **1306**. From field **1302** allows a commercial bank to specify one of its accounts from which payment is to be withdrawn. To account field **1302** allows the commercial bank to specify a  
5 pooled depositor group account to which payment is to be made. Amount field **1304** allows the commercial bank to specify a repayment amount. Repayment date field **1306** allows the commercial bank to specify a date for making the repayment. Finally, submit button **610** initiates the repayment transaction.

Figure 14 illustrates an exemplary accounts page **324** of commercial  
10 banks interface **118**. In the illustrated example, accounts page **324** includes an accounts table **1400** for providing information regarding a master NOW account posted by a commercial bank. In the illustrated example, accounts table **1400** includes an account field **1400**, a manager field **1402**, a total value field **1406**, a last traded value field **1408**, a last traded date field **1410**, an edit field **1412**,  
15 and a delete field **1414**. Account field **1400** stores an account identifier such as an account number. Manager field **1404** displays the manager of the account. Total value field **1406** displays the current value of the account. Last value field **1408** displays the last traded value of the account. Last traded date field **1410** stores the last date on which the account was traded. Finally, edit and  
20 delete fields **1412** and **1414** allows the commercial bank to edit any of the account data.

Figure 15 illustrates an exemplary transactions page **326** of commercial banks interface **118**. In the illustrated example, transaction page **326** includes

a transactions history table **1500** for storing information regarding transfers to and from a commercial bank's accounts with custodian **108**. Transactions history table **1500** may include a transaction number field **1502**, a date field **1504**, an operation field **1506**, a from account field **1508**, a to account field **1510**, an amount field **1512**, and a terms field **1514**. Transaction number field **1502** stores a number for a particular transaction. Date field **1504** stores the date of a transaction. Operation field **1506** stores the operation being performed, such as a withdrawal or a deposit. From account field **1508** specifies an account of a commercial bank from which funds are being withdrawn. To account field **1510** stores an account to which funds are being deposited. Amount field **1512** stores an amount of funds affected by the transaction. Finally, terms field **1514** stores the terms associated with a transaction.

Figure 16 illustrates an exemplary business rules page **328** for commercial banks interface **118**. In Figure 16, the business rules page includes a business rules table **1600** for storing business rules particular to commercial banks. In the illustrated example, business rules table **1600** includes a number field **1602**, a date created field **1604**, condition fields **1606**, **1608**, and **1610**, an action field **1612**, a current status field **1614**, and edit and delete fields **1616** and **1618**. Number field **1602** stores an identifier for a particular business rule. Date created field **1604** stores a date on which a business rule is created. Condition field **1606**, **1608**, and **1610** store business rules for a commercial bank. Examples of business rules for a commercial

bank may include terms over which funds would be needed. Action field **1612** stores an action to be performed if the conditions in fields **1606**, **1608**, and **1610** are met. Current status field **1614** stores the current status of a particular business rule. Finally, edit and delete fields **1616** and **1618** allow a commercial  
5 bank to edit or delete a business rule.

Figure 17 illustrates an exemplary market management page that may be displayed to custodian **108**. In the illustrated example, market management page **332** includes a market information section **1700** for displaying overall market information to custodian **108**. The market information section **1700** may  
10 include a cash demanded field **1702**, a cash available field **1704**, a start date field **1706**, a borrower interest field **1708**, a lender interest field **1712**, and a terms and conditions field **1714**. Cash demanded field **1702** may display cash demanded by commercial banks **114**. Cash available field **1704** may display cash available from pooled depositor groups **100**. Start date field **1706** may  
15 display the date on which cash is available. Borrower interest field **1708** may display the rate currently being paid by commercial banks **114**. Lender interest field **1710** may display the interest rate being paid to pooled depositor groups **100**. End date field **1712** may store the end date for a particular transaction. Finally, terms and conditions field **1714** may store terms and conditions  
20 associated with the current market.

Figure 18 illustrates an exemplary lenders page **324** associated with custodian interface **112**. In the illustrated example, lenders page **324** includes a lender information table **1800** that displays information regarding a pooled

depositor group. Lenders table **1800** includes a customer ID field **1800**, an ABA field **1804**, an account number field **1806**, a contact field **1808**, and edit and delete fields **1810** and **1812**. Customer ID field **1802** displays values for identifying a particular customer. ABA field **1804** displays a unique identifier for each lender. Account number field **1806** stores account numbers associated with NOW accounts posted by a particular commercial bank. Contact field **1808** may store contact information for individuals responsible for posting accounts with custodian **108**. Edit and delete fields **1810** and **1812** allow custodian **108** to change any of the data in the table.

Figure 19 illustrates an exemplary borrowers page **336** of custodian interface **112**. In the illustrated example, borrowers page **336** includes a borrowers table **1900** for displaying information about commercial banks **114**. Borrowers table **1900** includes a customer ID field **1902**, an ABA field **1904**, an account number field **1906**, a contact field **1908**, and edit and delete fields **1910** and **1912**. Customer ID field **1902** displays identifiers for a particular commercial bank. ABA field **1904** stores a unique identifier for each borrower. Account number field **1906** stores and displays account numbers associated with a particular commercial bank. Contact field **1908** stores and displays contact information associated with an individual at a commercial bank in charge of posting master NOW accounts. Edit and delete fields **1910** and **1912** allow custodian **108** to modify information in borrowers table **1900**.

Figure 20 illustrates an exemplary accounts page **338** associated with custodian interface **112**. In the illustrated example, accounts page **338**



includes an accounts table **2000** for storing information about accounts with  
custodian **108**. Accounts table **2000** includes an account field **2002**, a  
manager field **2004**, a total value field **2006**, a last traded value field **2008**, a  
last traded date field **2010**, and edit and delete fields **2012** and **2014**. Account  
5 field **2002** stores identifiers for identifying a particular account. Manager field  
**2004** identifies the manager of a particular account. Total value field **2006**  
stores the total value of an account. Last traded value field **2008** stores the last  
traded value of a particular account. Last traded date field **2010** stores the last  
date on which the account was traded. Finally, edit and delete fields **2012** and  
10 **2014** allow custodian **108** to modify fields in account table **2000**.

Figure 21 illustrates an exemplary transactions page **340** of custodian  
interface **112**. In the illustrated example, transactions page **340** includes a  
transaction table **2100** for storing and displaying information regarding  
transactions between pooled depositor groups **100** and commercial banks **114**.  
15 Transactions table **2100** may include a customer ID field **2102**, a transaction  
number field **2104**, a date field **2106**, an operation field **2108**, a from account  
field **2110**, a to account field **2112**, an amount field **2114**, and a terms field  
**2116**. Customer ID field **2102** may store an identifier for a customer initiating a  
transaction. Number field **2104** may store an identifier for the transaction field.  
20 Date field **2106** may store the date on which the transaction occurred.  
Operation field **2108** may identify the type of transaction, i.e., withdrawal or  
deposit. From account field **2110** stores an account from which funds are  
being withdrawn. To account field **2112** stores an account to which funds are

being deposited. Amount field **2114** stores the amount of the transaction. Terms field **2116** stores and displays terms associated with the transaction.

Figure 22 illustrates an exemplary business rules page **342** of custodian interface **112**. In the illustrated example, business rules page **342** includes a business rules table **2200** for storing business rules particular to a custodian. Custodian table **2200** may include a number field **2102**, a date created field **2204**, condition fields **2206**, **2208**, and **2210**, an action field **2212**, a current status field **2214**, and edit and delete fields **2216** and **2218**. Number field **2202** stores an identifier for a particular business rule. Date created field **2204** stores and displays the date on which a business rule is created. Condition fields **2206**, **2208**, and **2210** store conditions associated custodian created business rule. Examples of custodian business rules include list of depositor groups from which to receive deposits, lists of banks to which deposits are to be made, maximum amounts for deposits, and cut-off times for deposits on given days. Action field **2212** stores an action associated with a particular business rule. Current status field **2214** stores the current status of a business rule. Finally, edit and delete fields **2216** and **2218** allow custodian **108** to modify business rules in table **2200**.

Figure 23 illustrates an exemplary customers page that may be associated with control center administration interface **110**. In the illustrated example, customers page **346** includes a customer section **2300** and a customer profile section **2302**. Customer section **2300** includes a table having a customer ID field, an ABA field, an account number field, a contact information field, and edit and delete fields **2312** and **2314**. Customer field

**2304** stores identifiers for particular customers, including commercial banks and pooled depositor groups. ABA field **2306** stores a unique identifier for each customer. Account number field **2308** stores account numbers for each customer. Contact field **2310** stores and displays a contact person associated  
5 with each customer. Edit and delete fields **2312** and **2314** allow an administrator alter each field.

Customer profile section **2302** includes a customer ID field **2316**, a full name field **2318**, a short name field **2320**, a TIN field **2322**, an ABA number field **2324**, an account field **2306**, and a notes field **2308**. Each of the fields in  
10 customer profile section **2312** is used to add customer entries to customer table **2300**. Customer ID field **2316** is adapted to receive a customer name. Full name field **2318** receives the full name of a customer. Short name field **2320** may receive a shortened version of the customer name. TIN field **2322** receives a tax identification number. ABA field **2324** receives a unique  
15 identifier for each customer. Account number field **2326** receives account numbers for a particular customer. Notes field **2328** stores notes associated with a particular customer. Once an administrator has completed the fields in customer profile section **2302**, the administrator may select submit button **610** to create a new entry in customers table **2300**.

20 The remaining screens of administration interface **110** may be similar in format to those previously described. Administration interface **110** preferably allows the owners of control center **106** to collect sub-accounting information and transaction information from inventors **100**. Administration interface **110**

may also include functionality for allowing the owners of control center 106 to collect demand information from commercial banks 114. Administration interface 110 preferably also includes functionality for allowing control center 106 to instruct custodian 108 to transfer cash between depositors 100 and commercial banks 114. Yet another function that may be provided by administration interface 110 is the ability to calculate fees to be paid by commercial banks 114 to depositors 100 and to distribute these fees to the appropriate parties.

10

#### Example Transaction

As discussed above, the present invention facilitates transactions between pooled depositor groups 100 and commercial banks 114 by providing a convenient software interface for these groups to perform financial transactions. In one exemplary transaction, a commercial bank may register with control center 106 by accessing a registration web page provided by control center 106 and providing information that may be used by control center 106 to qualify the entity as a commercial bank. Once control center 106 qualifies the entity as a commercial bank, control center 106 provides a NOW account agreement to the commercial bank. Once the NOW account agreement is executed, control center 106 provides the commercial bank with a password and login ID to access a personalized commercial banks interface 118. The commercial bank uses commercial banks interface 118 to define its business rules and communicate deposit needs to custodian 108.

A depositor seeking to provide funds for deposit purposes accesses the registration web page provided by control center **106** and provides information usable by control center **106** to qualify the depositor. As discussed above, a pooled depositor group may be any group that is permitted to deposit funds in a  
5 NOW account. Such groups include municipalities, trust departments, pension funds, or any other group that can invest in a NOW account. Control center **106** also enters a deposit agreement with the depositor group. Once the agreement has been executed, control center **106** provides the depositor group with a password and login ID.

10 Once the depositor group receives its password and login ID, the depositor group accesses depositor interface **102** using the password and login ID and customizes the depositor interface to meet the depositor's business needs. For example, customizing the interface may include defining business rules associated with the particular depositor and specifying an amount of  
15 funds available for deposit. One particular business rule that the depositor may define includes whether or not all funds of all depositors are to be FDIC insured.

In order to deposit money, the depositor accesses depositor interface **102** and receives, in real time, the amount of money needed collectively by  
20 commercial banks **114** and the interest rate currently being paid for the money. If the interest rate is agreeable to the depositor group, the depositor group inputs information as to the amount of funds to be deposited, sub-accounting information, and when the funds are to be made available. This information is provided to control center **106**. Control center **106** provides the sub-accounting

information to custodian 108. Control center 106 also provides wiring instructions for the depositor group to transfer the money to custodian 108. Control center 106 informs custodian 108 to post the funds in a particular master NOW account. Custodian 108 may notify the commercial banks whose  
5 NOW accounts are being affected of the incoming cash. Control center 106 preferably also provides instructions to custodian 108 as to which banks to wire the funds.

As indicated above, the system illustrated in Figure 1 preferably allows depositors 100 to withdraw funds deposited in a master NOW account on a  
10 daily basis without penalty. One method for withdrawing funds includes identifying the bank in which a particular depositor's funds are deposited and providing wiring instructions for the bank to wire the requested funds to be withdrawn to custodian 108 and wiring the funds from custodian 108 to the requesting depositor group. While this method works, it is expensive due to the  
15 wiring transaction fees involved in delivering the funds from commercial banks 114, to custodian 108, and to depositors 100. In addition, this method unnecessarily displaces cash currently held by banks 114.

In order to reduce transaction expenses associated with withdrawals and to reduce displacement of cash held by commercial banks, custodian 108 may  
20 identify incoming deposits and withdrawal requests from depositors 100 on a given day, and, rather than requesting funds from a bank to satisfy withdrawal requests and then providing funds to the bank from an incoming deposit, custodian 108 may satisfy a withdrawal request from one depositor group using incoming funds from another depositor group. When this occurs, custodian



108 may simply update its accounting records so that ownership of the deposited funds of the depositor group requesting the withdrawal is changed to reflect that the depositor group whose incoming funds were used to satisfy the withdrawal is now the owner of the deposited funds. For example, if depositor  
5 group A requests a \$50,000 withdrawal and depositor group B simultaneously deposits \$100,000, custodian 108 may satisfy depositor group A's withdrawal request with \$50,000 of depositor group B's incoming funds. Custodian 108 then updates its accounting records so that \$50,000 of depositor group A's funds deposited in a particular NOW account are now owned by depositor  
10 group B. The remaining incoming funds from depositor group B may then be deposited in any master NOW account posted by commercial banks 114. By satisfying incoming withdrawal requests with incoming funds, custodian 108 reduces transaction fees and increases the depositor's return.

Thus, as described above, the present invention provides a convenient  
15 software interface for facilitating transactions between commercial banks and pooled depositor groups. The software interface may be implemented as web pages displayed to a custodian, pooled depositor groups, commercial banks, and an administrator. By aggregating deposit needs of multiple pooled depositor groups, the control center produces a stable source of funds for  
20 commercial banks that the commercial banks can consider as core deposits. In addition, because of the stable nature and volume of such funds, the commercial banks may be willing to pay a higher interest rate than the pooled depositor groups expect. As a result, the owners of the control center can generate revenue for facilitating the transactions.

It will be understood that various details of the invention may be changed without departing from the scope of the invention. Furthermore, the foregoing description is for the purpose of illustration only, and not for the purpose of limitation, as the invention is defined by the claims as set forth

5 hereinafter.

CLAIMS

What is claimed is:

1. A method for facilitating financial transactions between pooled depositor groups and commercial banks, the method comprising:
  - 5 (a) determining deposit needs of a plurality of pooled depositor groups;
  - (b) aggregating the deposit needs of the pooled depositor groups to provide a stable funds source;
  - (c) notifying commercial banks of the availability of the stable funds  
10 source and an amount of funds available in the stable funds source;
  - (d) setting an interest rate to be paid to the pooled depositor groups to a predetermined value based on an interest rate that the commercial banks are willing to pay for the stable funds source  
15 and an interest rate the pooled depositor groups expect as a return for use of funds in the stable funds source;
  - (e) receiving master negotiated order of withdrawal (NOW) account postings from the commercial banks;
  - (f) depositing funds from the stable funds source in the master  
20 NOW accounts; and
  - (g) allowing the pooled depositor groups to withdraw funds from the master NOW accounts on a demand basis without penalty.
2. The method of claim 1 wherein determining deposit needs of a plurality of pooled depositor groups includes determining deposit needs of trust

departments at commercial banks and wherein aggregating the deposit needs includes aggregating funds from the trust departments at multiple different commercial banks.

3. The method of claim 1 wherein determining deposit needs of a plurality  
5 of pooled depositor groups includes determining deposit needs of different municipalities and wherein aggregating the deposit needs includes aggregating funds from the municipalities.
4. The method of claim 1 wherein determining deposit needs of a plurality  
10 of pooled depositor groups includes determining deposit needs of different pension funds and wherein aggregating the deposit needs includes aggregating funds from the pension funds.
5. The method of claim 1 wherein notifying commercial banks of the  
15 availability of the stable funds source includes posting an amount of funds available and the interest rate on a website accessible by the commercial banks.
6. The method of claim 1 wherein notifying the commercial banks of the  
availability of the stable funds source includes automatically emailing the commercial banks of the amount of funds available and the interest rate at which the funds are available.
- 20 7. The method of claim 1 wherein setting the interest rate to be paid to the pooled depositor groups to a predetermined value includes setting the interest rate to a value below the interest rate that the commercial banks are willing to pay for the funds.

8. The method of claim 1 wherein receiving master NOW account postings and depositing funds in the NOW accounts includes establishing a custodian to manage cash flow into and from the accounts.
- 5 9. The method of claim 1 wherein allowing the pooled depositor groups to withdraw funds on a demand basis includes providing a web interface for the pooled depositor groups to access funds in one dollar dominations on a daily basis without penalty.
- 10 10. The method of claim 1 comprising receiving incoming deposits and withdrawal requests from the pooled depositor groups, satisfying the incoming withdrawal requests using the incoming deposits, and updating account records to change ownership of deposited funds without withdrawing funds from the commercial banks.
- 15 11. The method of claim 1 wherein steps (a)-(g) are implemented on a web server accessible to the commercial banks and the pooled depositor groups via secure web interfaces.
- 20 12. The method of claim 1 wherein depositing funds in a master NOW account includes depositing funds in excess of a federal deposit insurance limit from a single pooled depositor group in a master NOW account of a single commercial bank and providing federal deposit insurance or a collateral for the entire deposit.
13. The method of claim 1 wherein the commercial banks report the funds deposited in the master NOW accounts as core deposits.

14. A computer program product for facilitating financial transactions between pooled depositor groups and commercial banks, the computer program product comprising:
- 5 (a) determining deposit needs of a plurality of pooled depositor groups;
  - (b) aggregating the deposit needs of the pooled depositor groups to provide a stable funds source;
  - (c) notifying commercial banks of the availability of the stable funds source and an amount of funds available in the stable funds source;
  - 10 (d) setting an interest rate to be paid to the pooled depositor groups to a predetermined value based on an interest rate that the commercial banks are willing to pay for the stable funds source and an interest rate the pooled depositor groups expect as a return for use of funds in the stable funds source;
  - 15 (e) receiving master negotiated order of withdrawal (NOW) account postings from the commercial banks;
  - (f) depositing funds from the stable funds source in the master NOW accounts; and
  - 20 (g) allowing pooled depositor groups to withdraw funds from the master NOW accounts on a demand basis without penalty.
15. The computer program product of claim 14 wherein determining deposit needs of a plurality of commercial pooled deposit groups includes determining deposit needs of trust departments at commercial banks



and wherein aggregating the deposit needs includes aggregating funds from the trust departments at multiple different commercial banks.

16. The computer program product of claim 14 wherein determining deposit needs of a plurality of pooled groups includes determining deposit needs of different municipalities and wherein aggregating the deposit needs includes aggregating funds from the municipalities.
17. The computer program product of claim 14 wherein determining deposit needs of a plurality of pooled depositor groups includes determining deposit needs of different pension funds and wherein aggregating the deposit needs includes aggregating funds from the pension funds.
18. The computer program product of claim 14 wherein notifying commercial banks of the availability of the stable funds source includes posting an amount of funds available and the interest rate on a website accessible by the commercial banks.
19. The computer program product of claim 14 wherein notifying the commercial banks of the availability of the stable funds source includes automatically emailing the commercial banks of the amount of funds available and the interest rate at which the funds are available.
20. The computer program product of claim 14 wherein setting the interest rate to be paid to the pooled depositor groups to a predetermined value includes setting the interest rate to a value below the interest rate that the commercial banks are willing to pay for the funds.
21. The computer program product of claim 14 wherein receiving master NOW account postings and depositing funds in the NOW accounts

includes establishing a custodian to manage cash flow into and from the accounts.

22. The computer program product of claim 14 wherein allowing the pooled depositor groups to withdraw funds on a demand basis includes providing a web interface for the pooled depositor groups to access funds in one dollar dominations on a daily basis without penalty.
23. The computer program product of claim 14 comprising receiving incoming deposits and withdrawal requests from the pooled depositor groups, satisfying the incoming withdrawal requests using the incoming deposits, and updating account records to change ownership of deposited funds without withdrawing funds from the commercial banks.
24. The computer program product of claim 14 wherein steps (a)-(g) are implemented on a web server accessible to the commercial banks and the pooled depositor groups via secure web interfaces.
25. The computer program product of claim 14 wherein depositing funds in a master NOW account includes depositing funds in excess of a federal deposit insurance limit from a single pooled depositor group in a master NOW account of a single commercial bank and providing federal deposit insurance or collateral for the entire deposit.
26. The computer program product of claim 14 wherein the commercial banks report the funds deposited in the master NOW accounts as core deposits.
27. A system for facilitating financial transactions between commercial banks and pooled depositor groups comprising:

- (a) an depositor interface for allowing pooled depositor groups to post deposit needs;
  - (b) a control center interface for allowing a control center to view the deposit needs, to aggregate the deposit needs of multiple pooled depositor groups, to set a first interest rate to be paid to the pooled depositor groups for access to the stable funds source, to set a second interest rate to be paid by commercial banks for access to funds in the stable funds source and to notify the pooled depositor groups of the first interest rate and commercial banks of the second interest rate; and
  - (c) a commercial banks interface for allowing the commercial banks to post master negotiated order of withdrawal (NOW) accounts for receiving funds from the stable funds source, wherein the pooled depositor groups deposit funds in the master NOW accounts and the commercial banks provide access to the funds in the master NOW accounts on a demand basis without penalty.
28. The system of claim 27 wherein the depositor interface includes a market information page for allowing depositors to view information regarding cash available in the stable funds source and cash demanded by the commercial banks.
29. The system of claim 27 wherein the depositor interface includes a deposit information page for allowing the pooled depositor groups to deposit funds from the stable funds source in the master NOW accounts.

30. The system of claim 27 wherein the depositor interface includes a withdrawal page that allows the pooled depositor groups to withdraw funds from the master NOW accounts.
31. The system of claim 27 wherein the depositor interface includes a  
5 transactions page for displaying transactions to and from the master NOW accounts to the pooled depositor groups.
32. The system of claim 27 wherein the depositor interface includes a business rules page for displaying depositor created business rules to the pooled depositor groups and allowing the pooled depositor groups to  
10 modify the business rules.
33. The system of claim 27 wherein the commercial banks interface includes a market interface for displaying cash available from the pooled depositor groups and cash demanded by the commercial banks to a commercial bank.
- 15 34. The system of claim 27 wherein the commercial banks interface includes a borrow page for allowing a commercial bank to access funds in the stable funds source.
35. The system of claim 27 wherein the commercial banks interface includes a repay page for allowing the commercial bank to electronically  
20 repay money borrowed from the master NOW accounts.
36. The system of claim 27 wherein the commercial banks interface includes an accounts page for allowing commercial banks to view master NOW accounts posted by a particular commercial bank.

37. The system of claim 27 wherein the commercial banks interface includes a transactions page for allowing a commercial bank to view transactions to and from the master NOW accounts.
38. The system of claim 27 wherein the commercial banks interface  
5 includes a business rules page for allowing the commercial banks to define business rules.
39. The system of claim 27 wherein the administrator interface includes a customers page for allowing the administrator to define and view information regarding commercial banks and pooled depositor groups.
- 10 40. The system of claim 27 comprising a custodian interface for allowing a custodian to receive the master NOW account postings and to manage the flow of funds to and from the master NOW accounts.
41. The system of claim 40 wherein the custodian interface includes a market management page for allowing the custodian to view cash  
15 demanded by the commercial banks, cash available from the pooled depositor groups, and interest rates paid by the commercial banks and to the pooled depositor groups.
42. The system of claim 40 wherein the custodian interface includes a lenders page for allowing the custodian to view information regarding the  
20 pooled depositor groups.
43. The system of claim 40 wherein the custodian interface includes a borrowers interface for allowing the custodian to view information regarding commercial banks.

44. The system of claim 40 wherein the custodian interface includes an accounts page for allowing the custodian to view accounts associated with the pooled depositor groups and the commercial banks.
45. The system of claim 40 wherein the custodian interface includes a transactions page for allowing the custodian to view transactions to and from the master NOW accounts.
46. The system of claim 40 wherein the custodian interface includes a business rules page for allowing the custodian to define business rules associated with the transactions between the commercial banks and the pooled depositor groups.
47. The system of claim 40 wherein the custodian interface includes functionality for allowing the custodian to satisfy an incoming withdrawal request from a first pooled depositor group with an incoming deposit from a second pooled depositor group and for updating accounting records to reflect that funds deposited by the first pooled depositor group are now owned by the second pooled depositor group.



Abstract of the Disclosure

Methods and systems for facilitating transactions between commercial banks and pooled depositor groups are disclosed. Employees of a control center determine interest rate return needs of pooled depositor groups, such as

5 trust departments at commercial banks. The control center employees aggregate the funds to produce a stable funds source and communicate the availability of the stable funds source to commercial banks for core deposits. The commercial banks communicate cash needs to the control center. The control center sets an interest rate to be paid to the pooled depositor groups for

10 use of the funds to at least the depositor groups' expected rate of return and below and the rate that commercial banks are willing to pay for the funds. The banks post master NOW accounts and the pooled depositor groups deposit funds in the master NOW accounts. The pooled depositor groups are allowed to access the funds in the master NOW accounts on a daily basis without

15 penalty. The commercial banks have access to a stable source of funds that banking regulators may permit to be treated as core deposits.

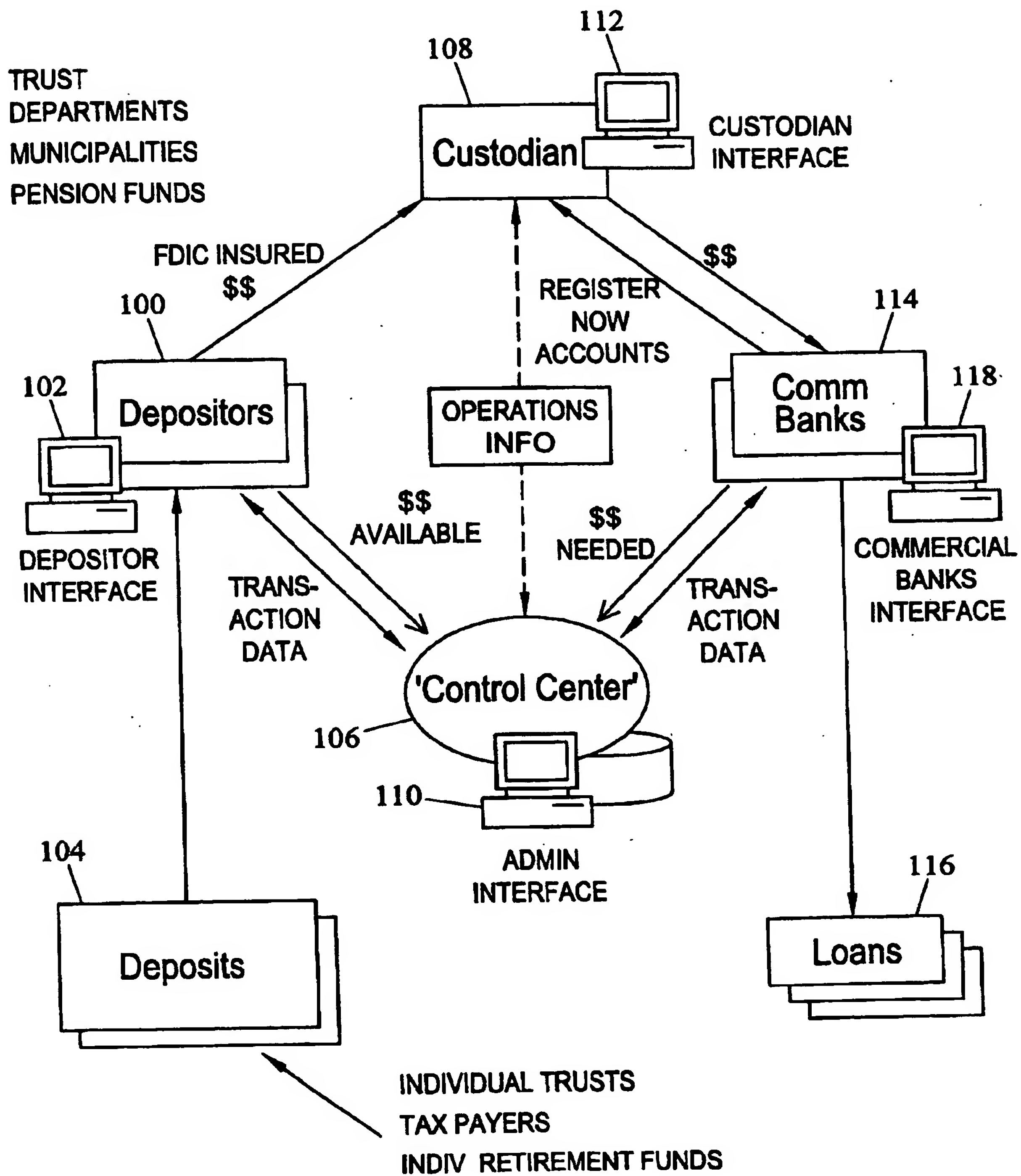


FIG. 1

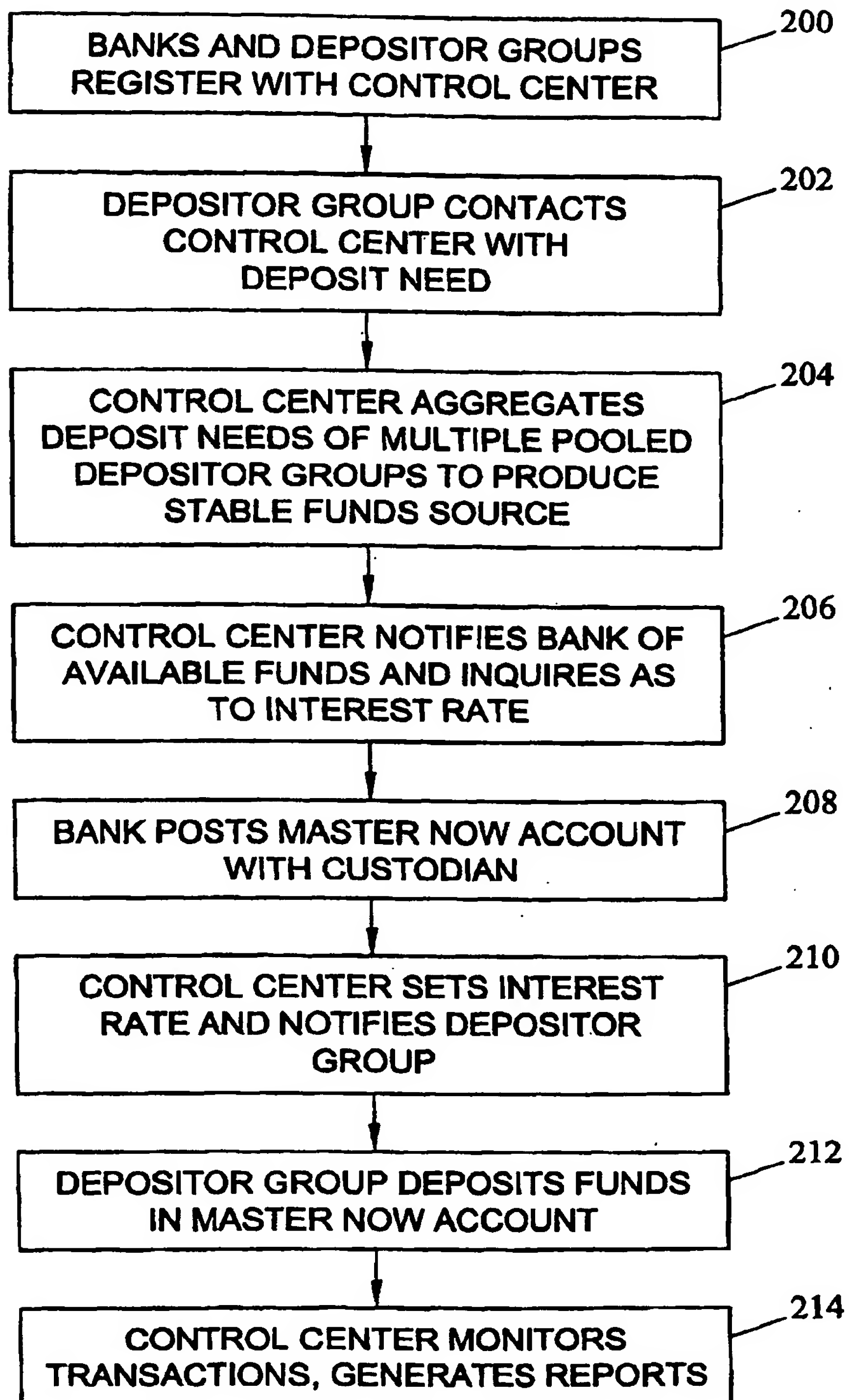


FIG. 2

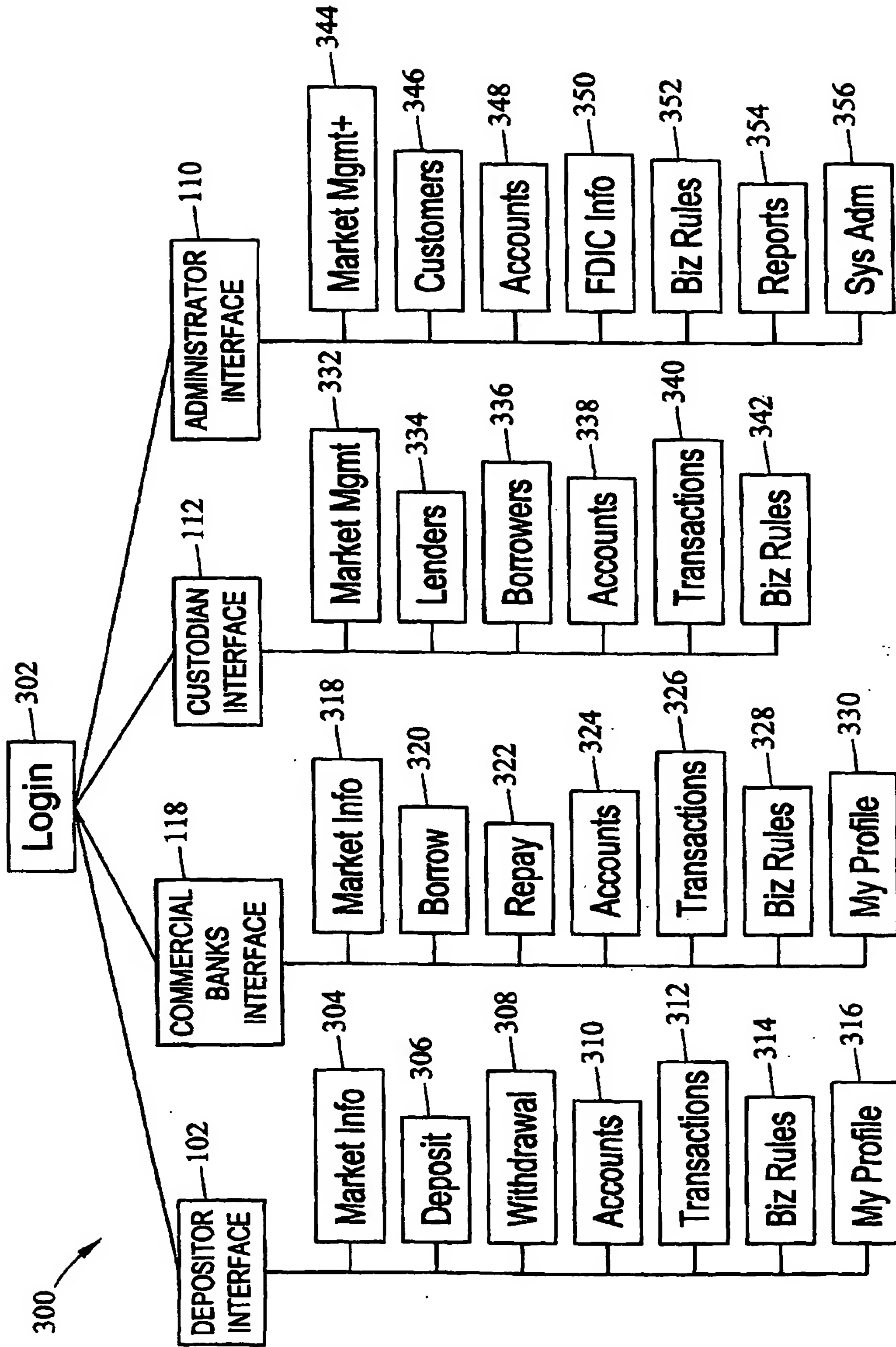


FIG. 3

302

User ID

Password

Submit

FIG. 4

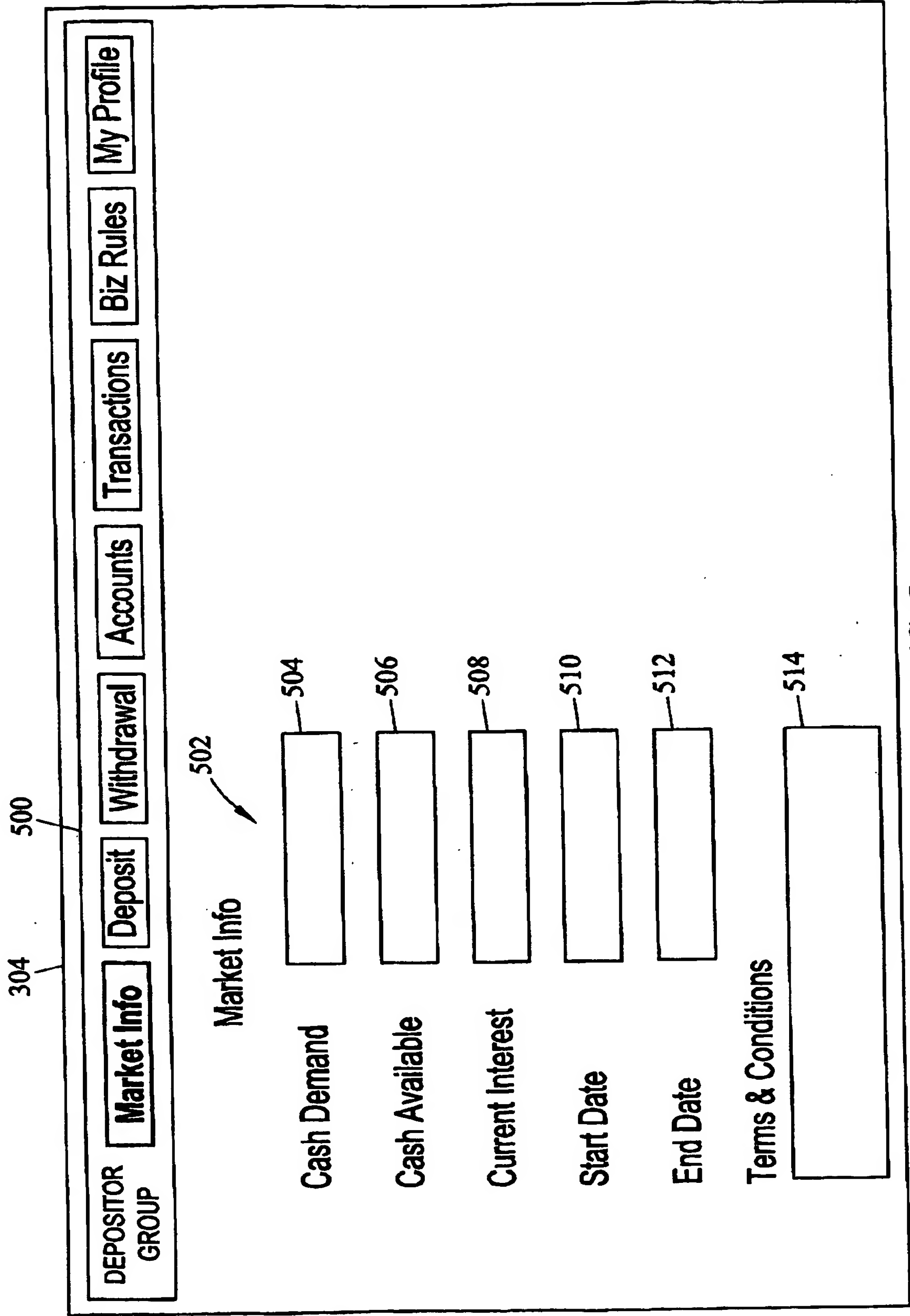


FIG. 5



306

500

DEPOSITOR GROUP

Market Info

Deposit

Withdrawal

Accounts

Transactions

Biz Rules

My Profile

Deposit

From L-Account

600

To T-Account

602

Amount

604

Deposit Date

606

Terms & Conditions

608

Submit

610

FIG. 6

308

500

DEPOSITOR GROUP

Market Info

Deposit

Withdrawal

Accounts

Transactions

Biz Rules

My Profile

Withdrawal

From T-Account

700

To L-Account

702

Amount

704

Withdrawal Date

706

Submit

610

FIG. 7

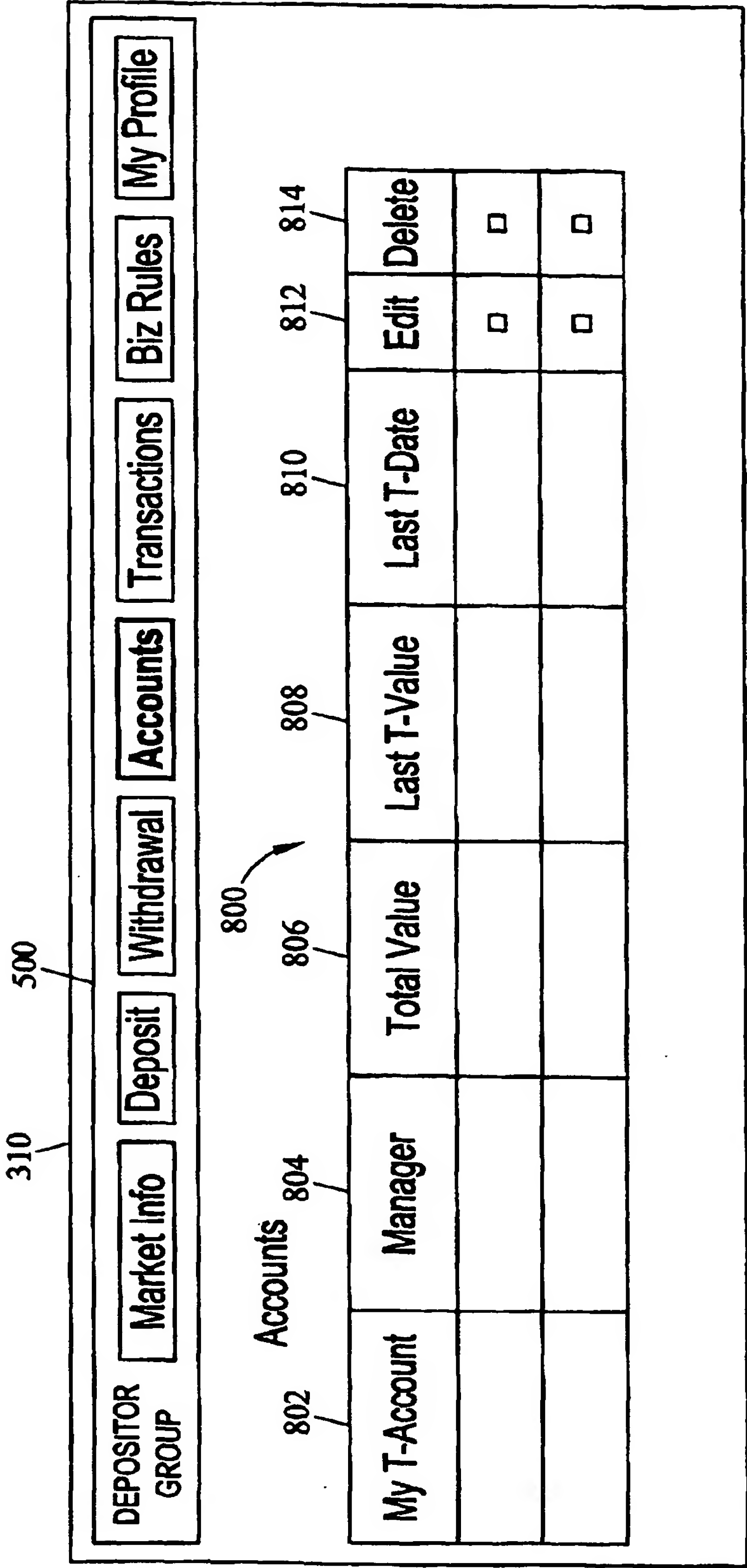


FIG. 8

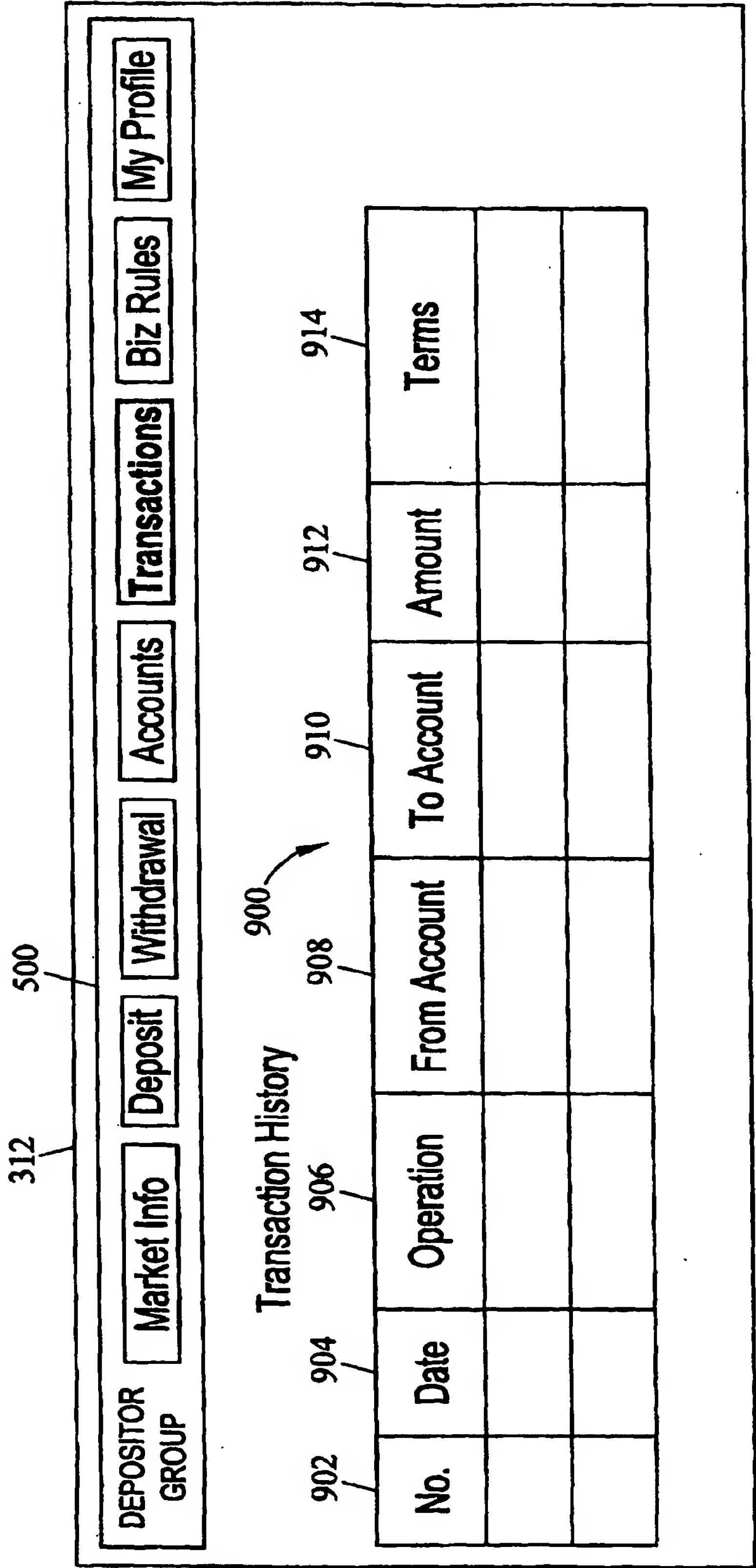


FIG. 9

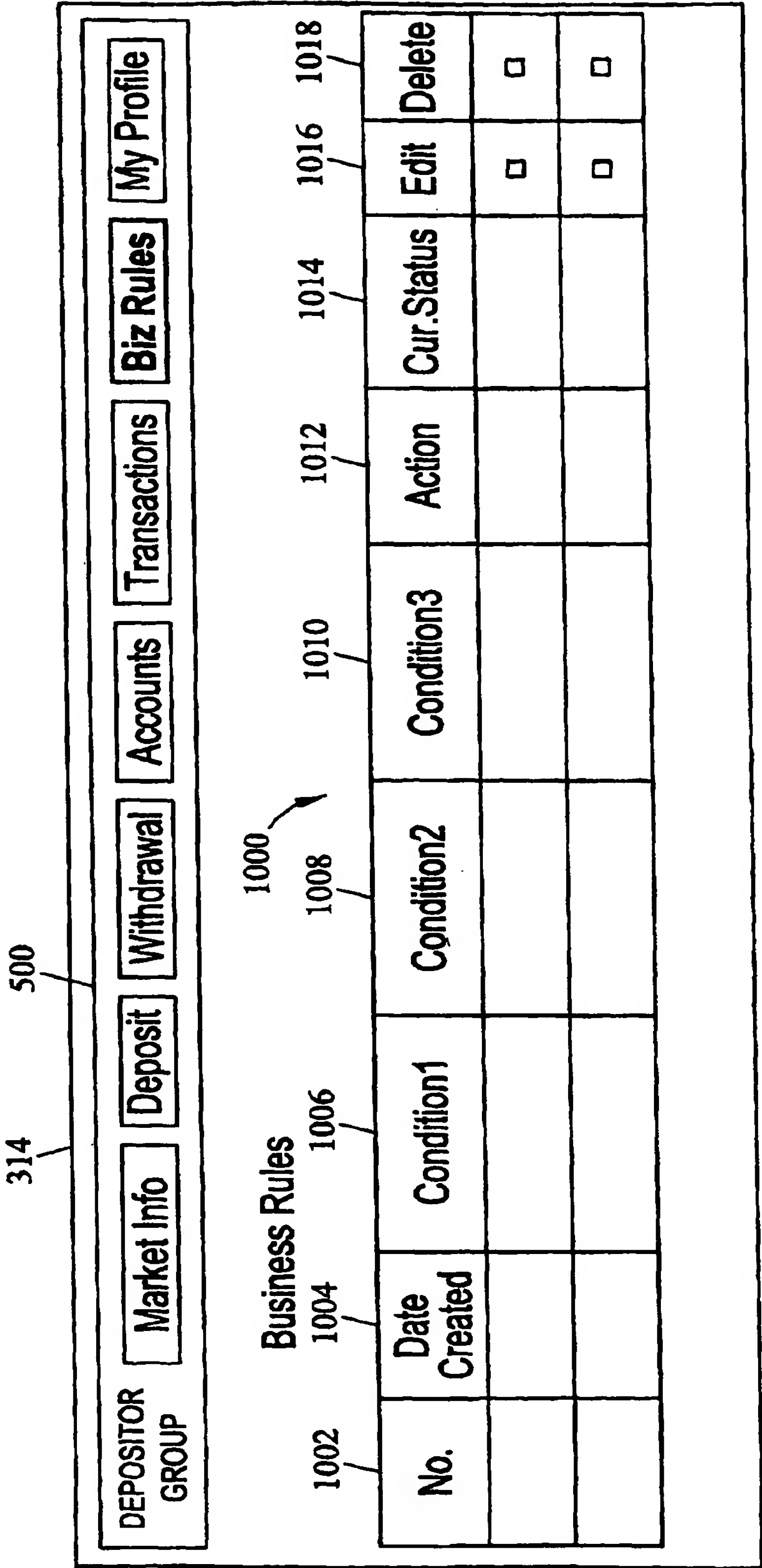


FIG. 10

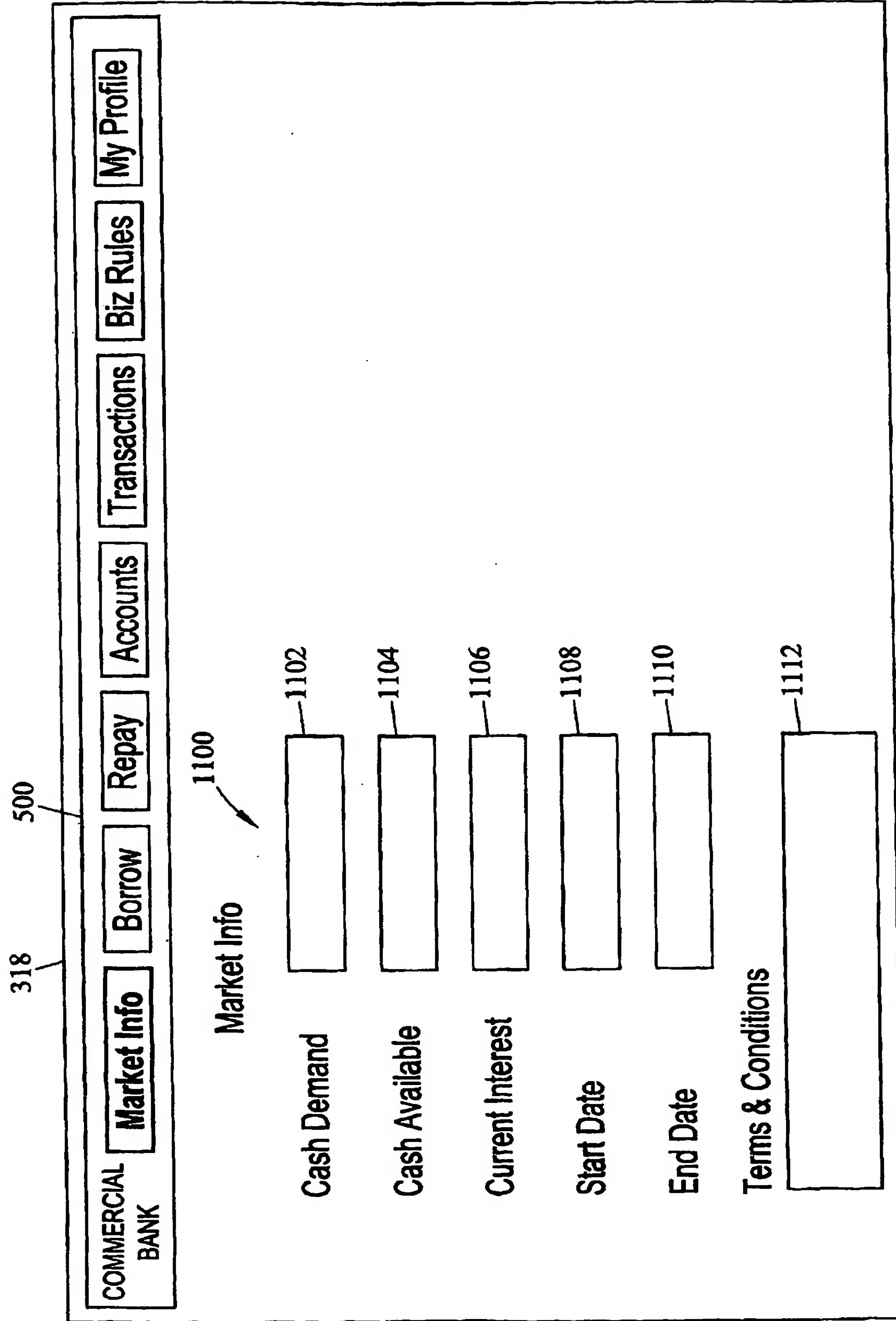


FIG. 11



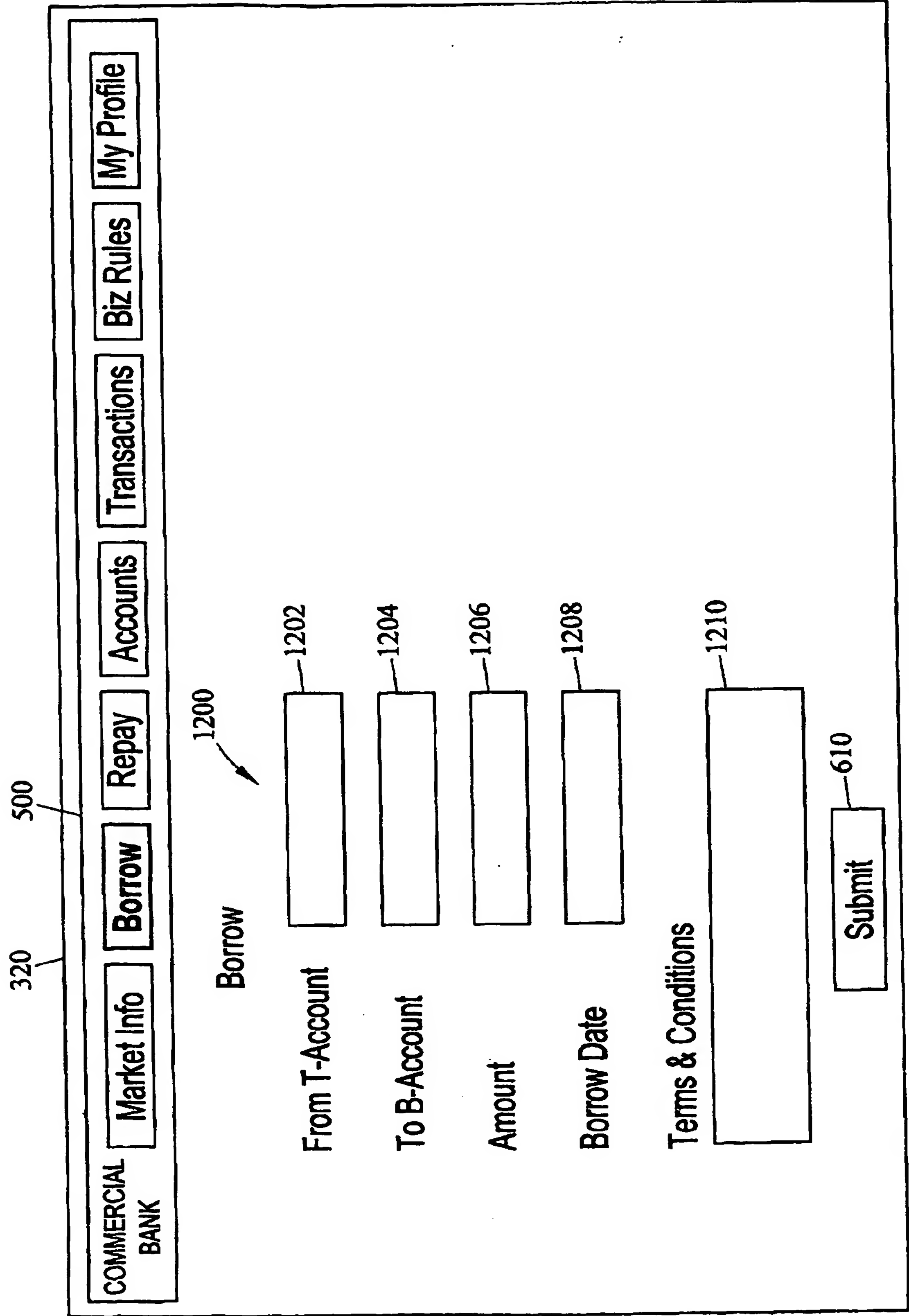


FIG. 12

322

500

COMMERCIAL BANK

Market Info

Borrow

Repay

Accounts

Transactions

Biz Rules

My Profile

Repay

From B-Account

1300

To T-Account

1302

Amount

1304

Repayment Date

1306

Submit

610

FIG. 13

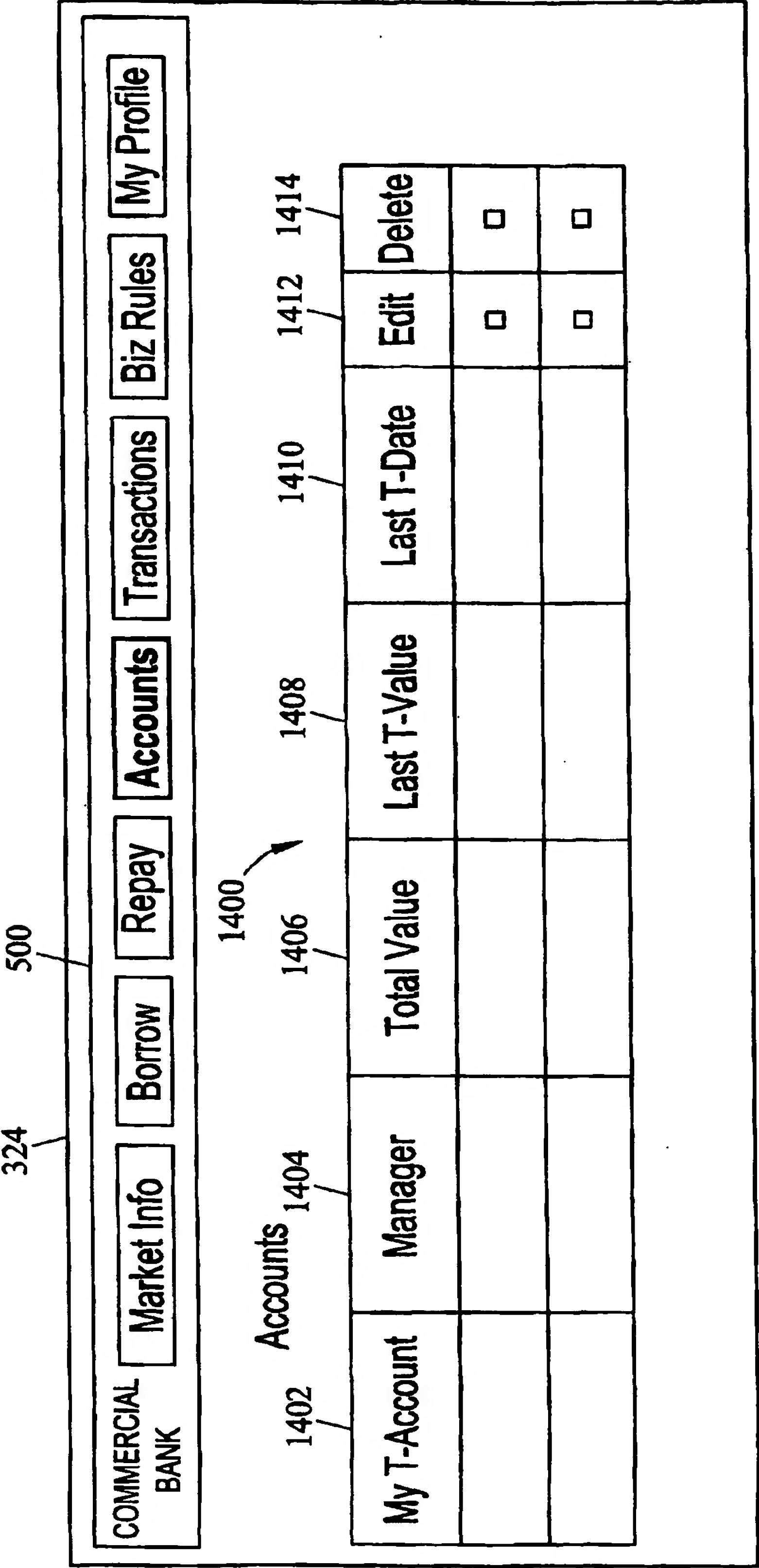


FIG. 14

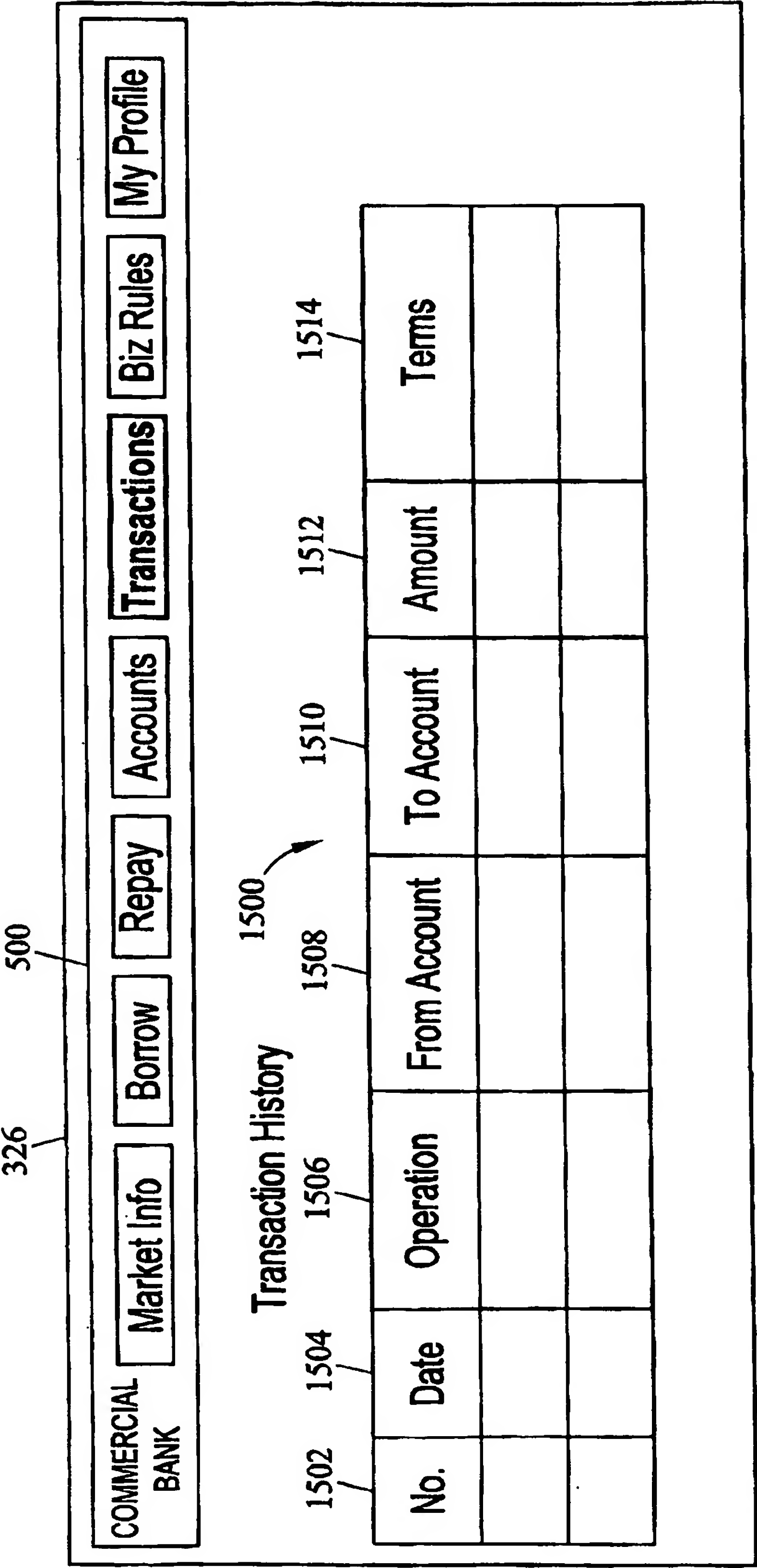


FIG. 15

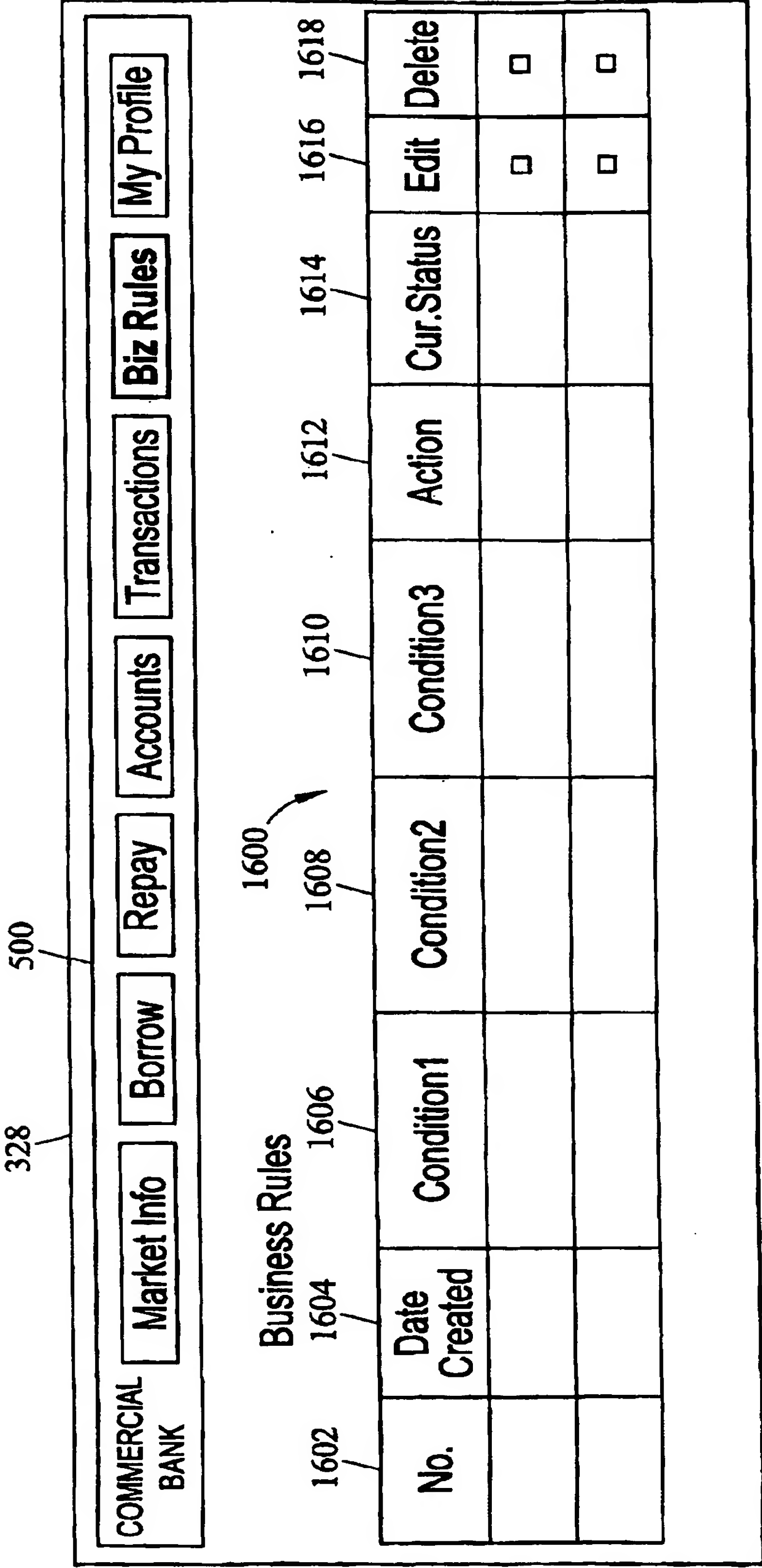


FIG. 16

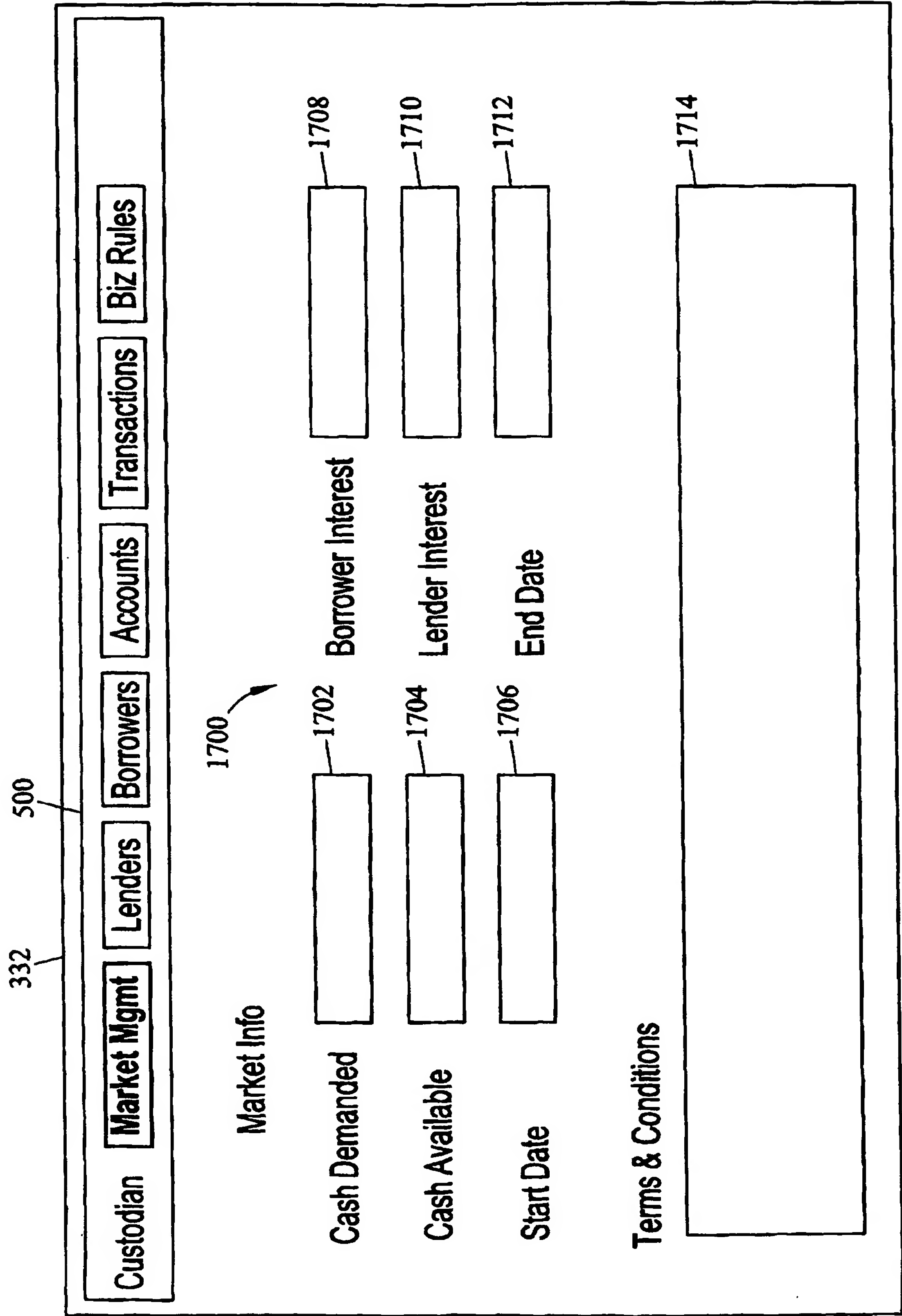


FIG. 17



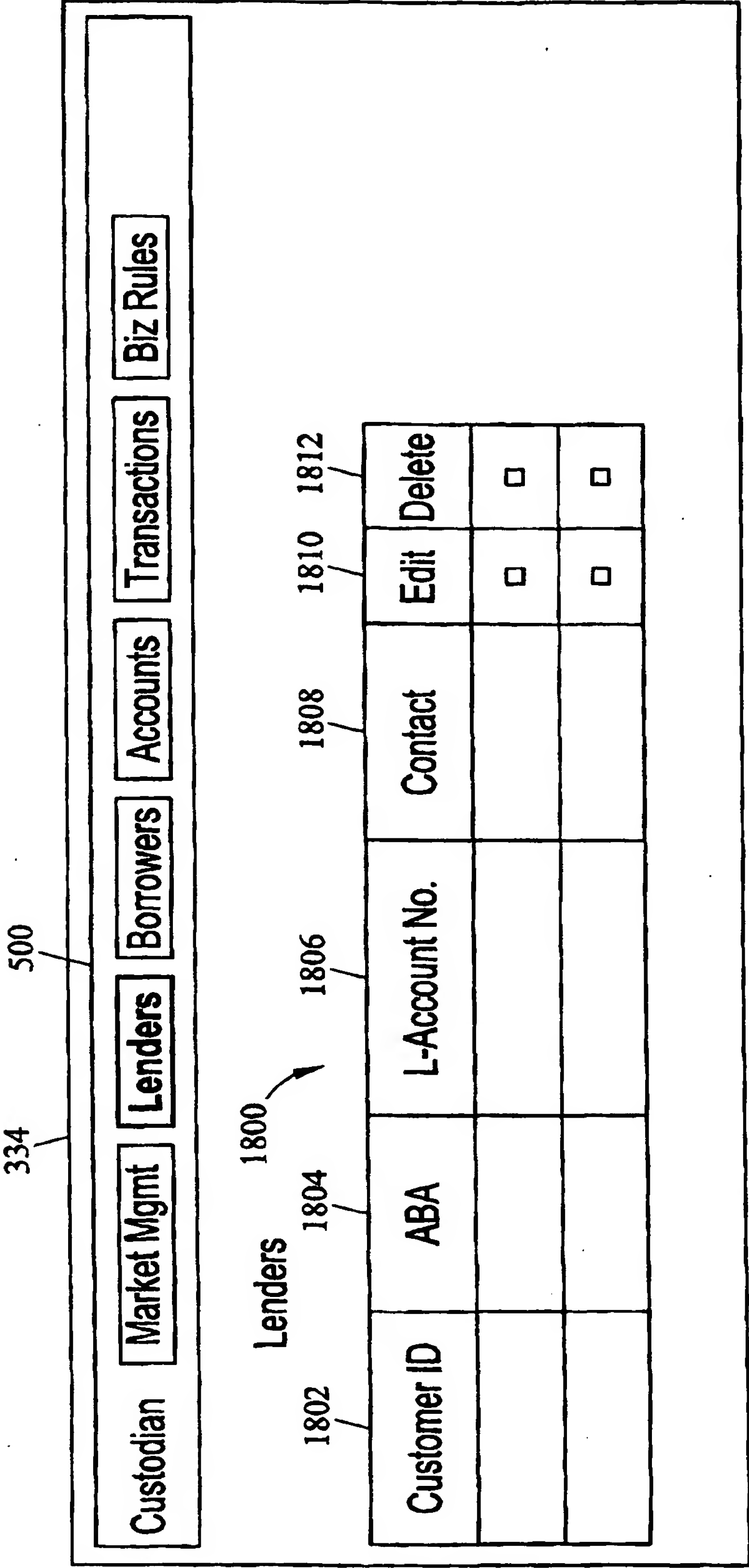


FIG. 18

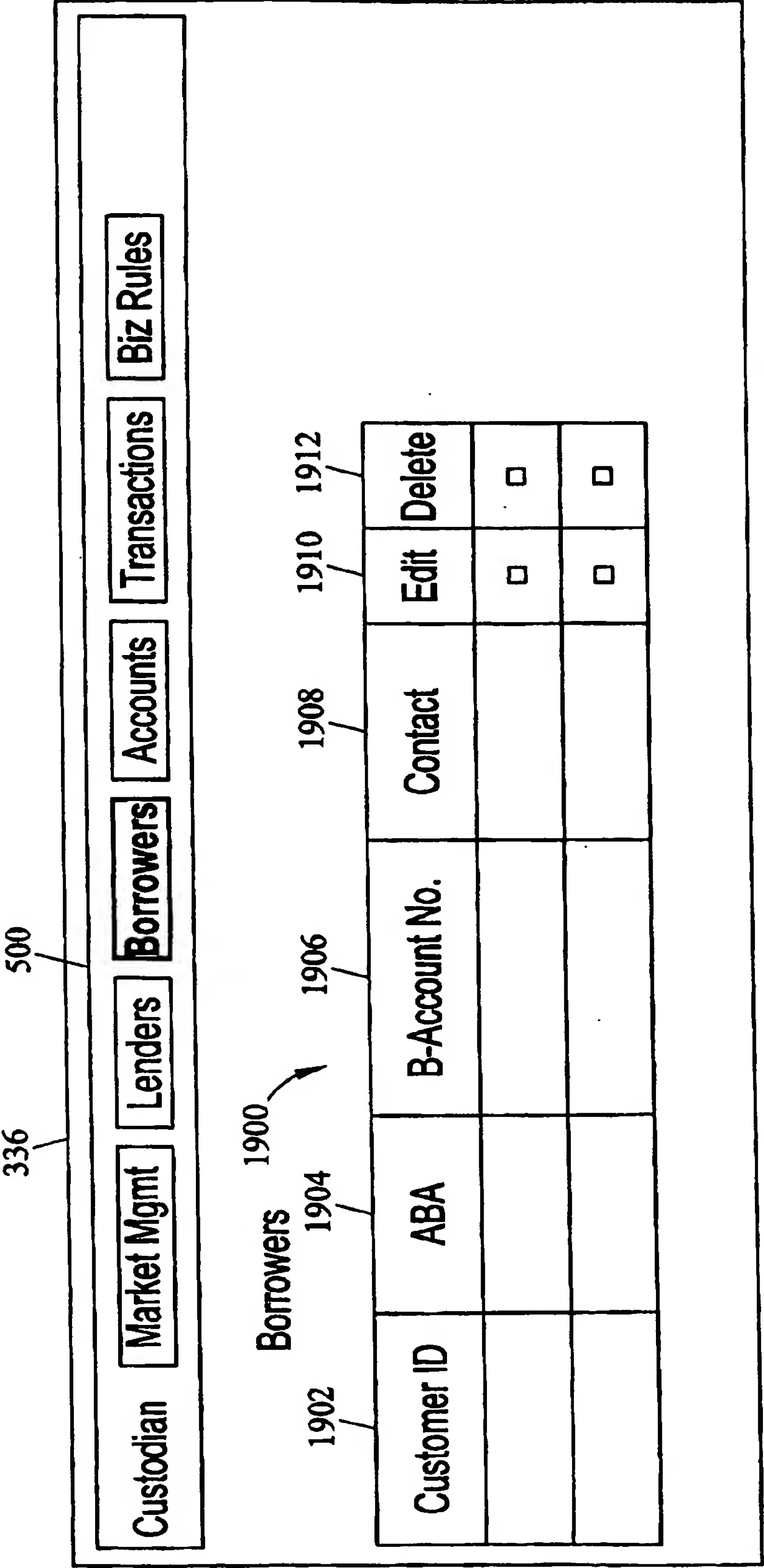


FIG. 19

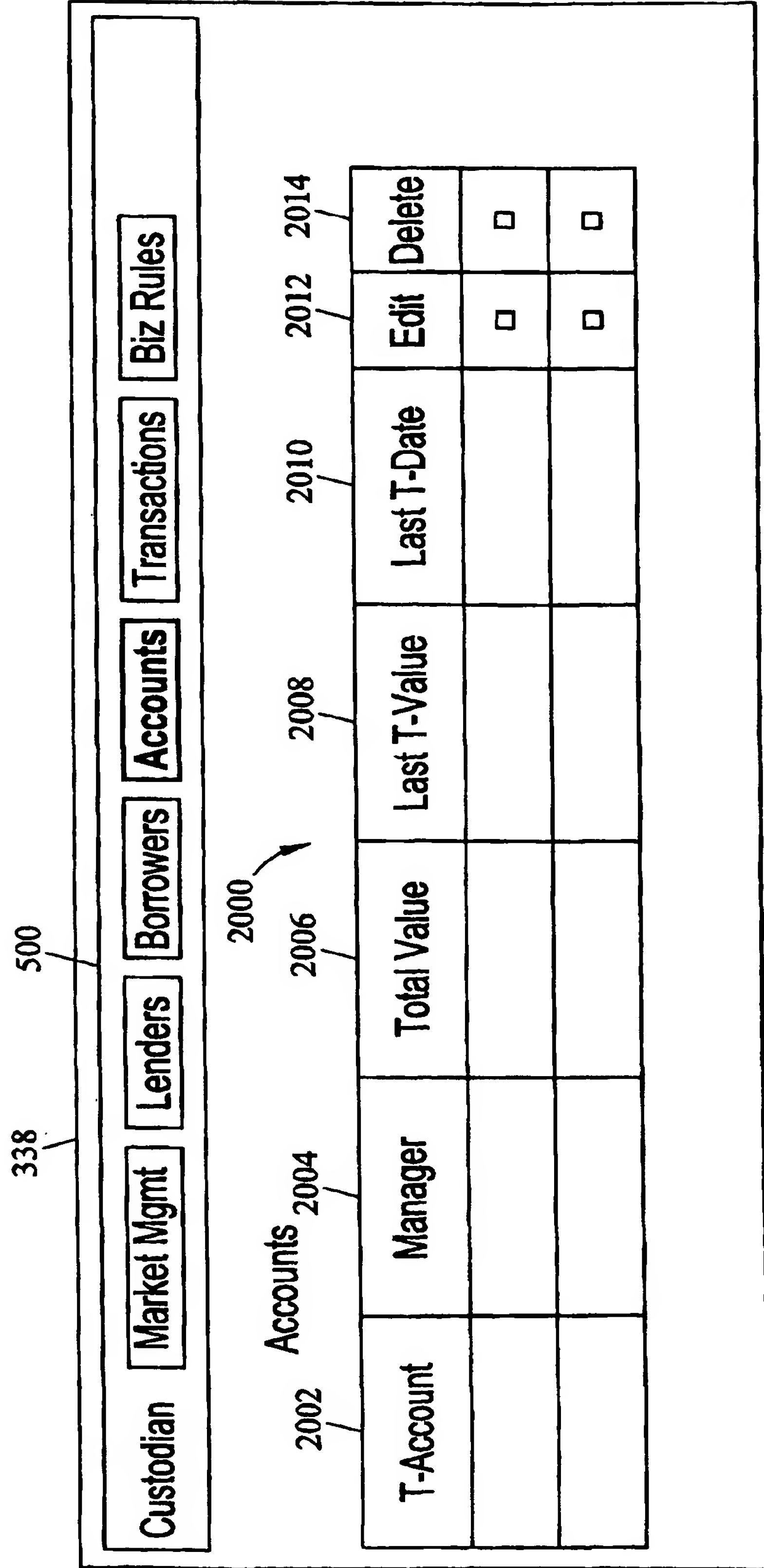


FIG. 20

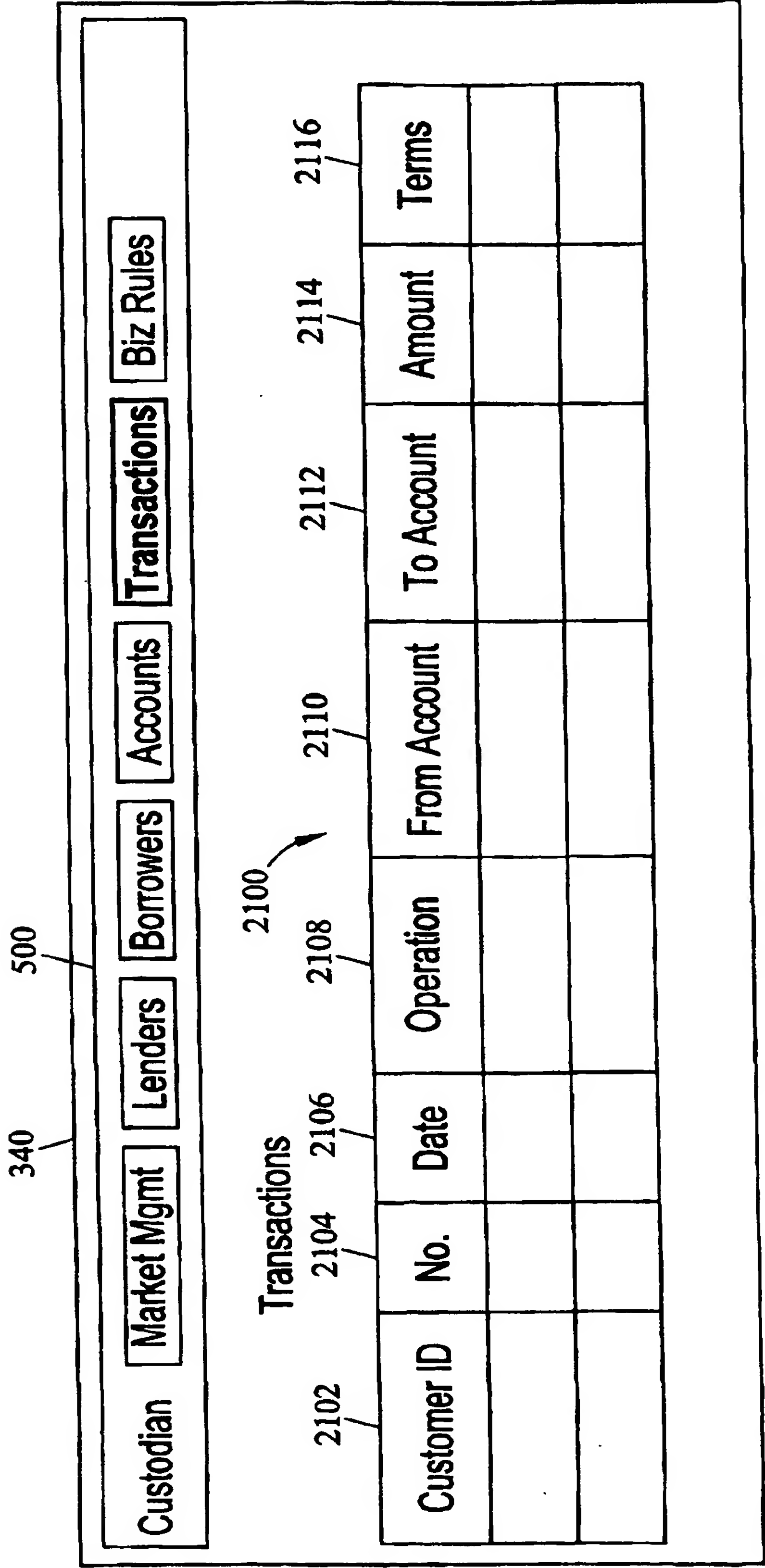


FIG. 21

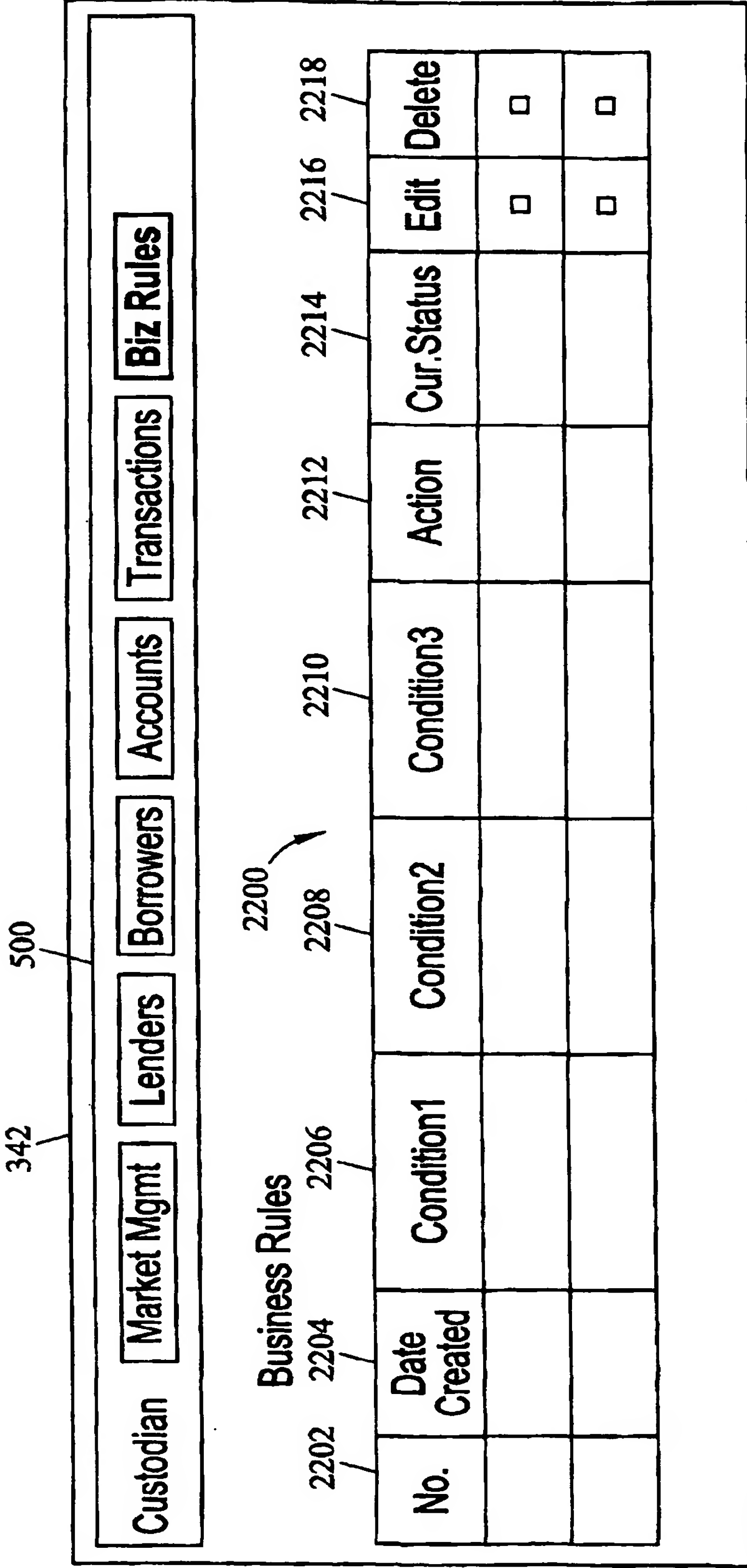


FIG. 22

346

500

Administrator

Market Mgmt+

Customers

Accounts

FDIC Info

Biz Rules

Reports

Sys Adm

2300

Customers

2304

Customer ID	ABA	Account No.	Contact	Edit	Delete
				<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>

2306

2308

2310

2312

2314

2302

Customer Profile

Customer ID

2316

Full name

2318

Short Name

2320

TIN

2322

ABA #

2324

Account #

2326

Notes

2328

Submit

610

FIG. 23

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**DECLARATION FOR UTILITY OR  
DESIGN  
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(37 CFR 1.63)**



Declaration  
Submitted  
With Initial  
Filing

OR



Declaration  
Submitted after Initial  
Filing (surcharge  
(37 CFR 1.16 (e))  
required)

Attorney Docket Number

1483/3

First Named Inventor

Richard W. Whiting

COMPLETE IF KNOWN

Application Number

Filing Date

Herewith

Art Unit

Examiner Name

I hereby declare that:

Each inventor's residence, mailing address, and citizenship are as stated below next to their name.

I believe the inventor(s) named below to be the original and first inventor(s) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

**METHODS AND SYSTEMS FOR FACILITATING TRANSACTIONS BETWEEN COMMERCIAL  
BANKS AND POOLED DEPOSITOR GROUPS**

(Title of the Invention)

the specification of which



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Application Number

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Additional foreign application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto.

[Page 1 of 2]

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☐ A petition has been filed for this unsigned inventor

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Supplemental SheetPage 1 of 1

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Tally M.		Ryan	
Inventor's Signature		Date	
Residence: City Edenton	State NC	Country US	Citizenship
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- ☐ **GRAY SCALE DOCUMENTS**
- ☒ **LINES OR MARKS ON ORIGINAL DOCUMENT**
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